

2014-1506,-1515

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

**INTELLECTUAL VENTURES I LLC,
AND INTELLECTUAL VENTURES II LLC,**

Plaintiffs-Appellants,

v.

**CAPITAL ONE, NATIONAL ASSOCIATION, CAPITAL ONE BANK
(USA), NATIONAL ASSOCIATION, AND CAPITAL ONE FINANCIAL
CORPORATION,**

Defendants-Cross Appellants.

Appeals from the United States District Court for the Eastern District of Virginia
in No. 1:13-cv-00740-AJT- TCB, Judge Anthony J. Trenga.

**CORRECTED BRIEF OF PLAINTIFFS-APPELLANTS INTELLECTUAL
VENTURES I LLC AND INTELLECTUAL VENTURES II LLC**

Elizabeth Day
Clayton Thompson
Marc Belloli
FEINBERG DAY ALBERTI &
THOMPSON, LLP
1600 El Camino Real, Suite 280
Menlo Park, CA 94025
650.618.4360

Thomas Burns
ADDUCI, MASTRIANI, &
SCHAUMBERG, LLP
1133 Connecticut Ave., NW, 12th Flr.
Washington, DC 20036
202.467.6300

*Attorneys for Intellectual Ventures I LLC
and Intellectual Ventures II LLC*

Date: August 1, 2014

FORM 9. Certificate of Interest

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

Intellectual Ventures I LLC, Intellectual Ventures II LLC v. Capital One Financial, et al.

No. 14-1506, 14-1515

CERTIFICATE OF INTEREST

Counsel for the (petitioner) (appellant) (respondent) (appellee) (amicus) (name of party)

Appellant Intellectual Ventures certifies the following (use "None" if applicable; use extra sheets if necessary):

1. The full name of every party or amicus represented by me is:

Intellectual Ventures I LLC
Intellectual Ventures II LLC

2. The name of the real party in interest (if the party named in the caption is not the real party in interest) represented by me is:

N/A

3. All parent corporations and any publicly held companies that own 10 percent or more of the stock of the party or amicus curiae represented by me are:

N/A

4. ☒ The names of all law firms and the partners or associates that appeared for the party or amicus now represented by me in the trial court or agency or are expected to appear in this court are:

Margaret Elizabeth Day, Clayton Thompson, Marc Belloli - Feinberg Day Alerti & Thompson LLP;
Thomas R. Burns, Jr. - Adduci, Mastriani & Schaumberg, LLP

06/12/2014

Date

/s/ Thomas R. Burns, Jr.

Signature of counsel

Thomas R. Burns, Jr.

Printed name of counsel

Please Note: All questions must be answered
cc: Counsel of Record

TABLE OF CONTENTS

I.	STATEMENT OF RELATED CASES.....	1
II.	JURISDICTIONAL STATEMENT	1
III.	STATEMENT OF THE ISSUES	2
IV.	STATEMENT OF THE CASE	3
V.	STANDARD OF REVIEW.....	4
VI.	STATEMENT OF FACTS	5
A.	The Patents-in-Suit.....	5
1.	U.S. Patent No. 7,603,382.....	5
2.	U.S. Patent No. 8,083,137.....	9
3.	U.S. Patent No. 7,260,587.....	12
B.	The District Court’s Order Regarding Infringement of the ’587 Patent.....	15
VII.	SUMMARY OF THE ARGUMENT	18
VIII.	ARGUMENT.....	20
A.	The District Court Erred in Finding That the ’382 and ’137 Patents Claim Unpatentable Abstract Ideas Under 35 U.S.C. § 101	20
1.	The Claims of the ’382 Patent Are Not Directed or Drawn to an Abstract Idea	22
a)	Assuming the ’382 Patent Claims an Abstract Idea (It Does Not), the Claimed Limitations Recite Significantly More	26
2.	The Claims of the ’137 Patent Are Not Directed or Drawn to an Abstract Idea	30

a).	Assuming the '137 Patent Claimed an Abstract Idea (It Does Not), the Claim Limitations Recite Significantly More	33
B.	The District Court Erred in Finding That the Term “Interactive Interface” in the '382 Patent Is Indefinite	38
1.	The District Court Should Have Analyzed the Claim Language Itself.....	39
1.	The District Court’s Construction Was Not Indefinite	42
C.	The District Court Erred in Finding That the '587 Patent Was Not Infringed Because of an Erroneous Construction of the “Machine Readable Form”.....	49
IX.	CONCLUSION.....	52

TABLE OF AUTHORITIES

Cases

<i>Adams Respiratory Therapeutics, Inc. v. Perrigo Co.</i> , 616 F.3d 1283 (Fed. Cir. 2010)	50
<i>Alice Corp. v. CLS Bank Int’l</i> , 573 U.S. —, 134 S. Ct. 2347 (2014)	passim
<i>AT&T Corp. v. Excel Commc’ns, Inc.</i> , 172 F.3d 1352 (Fed. Cir. 1999)	5
<i>Athletic Alts., Inc. v. Prince Mfg., Inc.</i> , 73 F.3d 1573 (Fed. Cir. 1996)	48
<i>Bilski v. Kappos</i> , 561 U.S. 593 (2010)	17, 21, 22
<i>CLS Bank Intern. v. Alice Corp. Pty. Ltd.</i> , 717 F.3d 1269 (Fed. Cir. 2013)	28, 37
<i>Diamond v. Diehr</i> , 450 U.S. 175 (1981)	18, 19, 32
<i>Gottschalk v. Benson</i> , 409 U.S. 63 (1972)	21, 24
<i>In re Alappat</i> , 33 F.3d 1526 (Fed. Cir. 1994)	29, 36
<i>Laber v. Harvey</i> , 438 F.3d 404 (4th Cir. 2006)	5
<i>Landmark Screens, LLC v. Morgan, Lewis, & Bockius, LLP</i> , 676 F.3d 1354 (Fed. Cir. 2012)	4
<i>Liebel–Flarsheim Co. v. Medrad, Inc.</i> , 358 F.3d 898 (Fed. Cir. 2004)	47
<i>Lighting Ballast Control LLC v. Philips Elecs. N. Am. Corp.</i> , 744 F.3d 1272 (Fed. Cir. 2014)	5
<i>Markman v. Westview Instruments, Inc.</i> , 52 F.3d 967 (Fed. Cir. 1995)	41
<i>Mayo Collaborative Servs. v. Prometheus Labs., Inc.</i> , 566 U.S. —, 132 S. Ct. 1289 (2012)	21, 22, 24, 26

<i>Nautilus, Inc. v. Biosig Instruments, Inc.</i> , – U.S. – , 134 S. Ct. 2120 (2014)	39, 40, 46
<i>O2 Micro Int’l Ltd. v. Beyond Innovation Tech. Co., Ltd.</i> , 521 F.3d 1351 (Fed. Cir. 2008)	41
<i>Parker v. Flook</i> , 437 U.S. 584 (1978)	24
<i>Rhine v. Casio, Inc.</i> , 183 F.3d 1342 (Fed. Cir. 1999)	41
<i>Tate Access Floors v. Interface Architectural Res.</i> , 279 F.3d 1357 (Fed. Cir. 2002)	41
<i>Wellman, Inc. v. Eastman Chem. Co.</i> , 642 F.3d 1355 (Fed. Cir. 2011)	5
Statutes	
28 U.S.C. § 1295(a)(1)	2
28 U.S.C. § 1331	1
28 U.S.C. § 1338	1
35 U.S.C. § 101	4
35 U.S.C. § 112	4, 40

I. STATEMENT OF RELATED CASES

Pursuant to Federal Circuit Rules 28(a)(4) and 47.5, Appellants Intellectual Ventures I LLC and Intellectual Ventures II LLC certify that no other appeal in or from the same civil action or proceeding in the lower court or body was previously before this or any other appellate court.

The following cases are pending in other courts, involve one or more of the patents at issue in this appeal, and thus could be directly affected by this court's decision: *Intellectual Ventures I LLC, et al. v. PNC Financial Services Group, Inc., et al*, Civil Action No. 2:13-cv-00740-AJS in the Western District of Pennsylvania; *Intellectual Ventures I LLC, et al. v. Manufacturers and Traders Trust Company*, Civil Action No. 13-cv-1274-SLR in the District of Delaware; *Intellectual Ventures I LLC, et al. v. Bank of America, National Association*, Case No. 3:13-cv-358 in the Western District of North Carolina; *Intellectual Ventures I LLC, et al. v. Fifth Third Bancorp, et al*, Case No. 1:13CV378 in the Southern District of Ohio; *Intellectual Ventures I LLC, et al. v. HSBC USA Inc., et al.*, Civil Action No. 13-CV-5386 (WHP)(AJP) in the Southern District of New York.

II. JURISDICTIONAL STATEMENT

The district court had jurisdiction over the patent infringement action giving rise to this appeal under 28 U.S.C. § 1331 and § 1338. IV timely filed its Notice of Appeal on May 13, 2013. A0794-A0796. This Court has jurisdiction

under 28 U.S.C. § 1295(a)(1) because the final judgment was entered on April 22, 2014. A0793.

III. STATEMENT OF THE ISSUES

The following four issues are presented on appeal:

(1) Did the district court err in finding that U.S. Patent No. 7,603,382—which recites specific systems and methods for customizing content on a web page through an interactive interface and based upon various user specific information as well as website navigation data—claims an unpatentable abstract idea?

(2) Did the district court err in finding that U.S. Patent No. 8,083,137—which recites a specific application of database technology for administering financial accounts and communicating transaction information to users—claims an unpatentable abstract idea? Related to this issue is whether the district court erred in not construing “storing, in a database, a profile keyed to a user identity and containing one or more user-selected categories to track transactions associated with said user identity” to include computer technology?

(3) Did the district court err in finding that U.S. Patent No. 7,603,382 is invalid when it found that its construction of the term “interactive interface” was indefinite?

(4) Did the district court err in construing the claims of U.S. Patent No. 7,260,587 that recite a “machine readable instruction form” to require “a hard

copy form that is presented and scanned along with the hard copy images and which physically separates the categories of images, as defined by a user” in its explanation of the construction?

IV. STATEMENT OF THE CASE

On June 19, 2013, Appellants Intellectual Ventures I LLC and Intellectual Ventures II LLC (collectively, “IV”) filed this case against Appellees Capital One Financial Corporation, Capital One Bank (USA), National Association and Capital One, National Association (collectively, “Capital One”) in the Eastern District of Virginia. A0001-A0017. IV asserted U.S. Patent Nos. 7,603,382 (“the ’382 patent”), 8,083,137 (“the ’137 patent”), 7,260,587 (“the ’587 patent”), 7,664,701 (“the ’701 patent”) and 6,182,894 (“the ’894 patent”) against Capital One. *Id.* The ’382 patent, the ’137 patent, and the ’587 patent are at issue in this appeal.

On December 18, 2013, the district court issued its Claim Construction Order. A0752-A0760. The district court construed a number of terms in each patent, several of which are at issue and germane to this appeal:

- For the ’382 patent, the district court construed the term “interactive interface” to mean “a selectively tailored medium by which a web site user communicates with a web site information provider.” A0756.
- For the ’137 patent, the district court found that the phrase “storing, in a database, a profile keyed to a user identity and containing one or more user-selected categories to track transactions associated with said user identity” “shall be construed according to its plain and ordinary meaning.” A0759.

- For the '587 patent, the district court found that those terms that have a “machine readable instruction form” required “a hard copy form that is presented and scanned along with the hard copy images and which physically separates the categories of images, as defined by a user.” A0760.

In light of the district court’s Claim Construction Order, IV stipulated to non-infringement of the '587 patent. A0761-A0776. The district court then entered judgment on the '587 patent on January 23, 2014. A0777-A0778.

On April 16, 2014, the district court granted Capital One’s motion for summary judgment with respect to the '382 patent and the '137 patent. A0779-A0792. In granting summary judgment, the district court found that the '382 patent and the '137 patent were invalid under 35 U.S.C. § 101 (“Section 101”). A0780-A0785. The district court further found that the '382 patent was invalid as indefinite under 35 U.S.C. § 112 (“Section 112”) based upon its construction of the term “interactive interface.” A0785-A0791.

On April 22, 2014, the district court entered judgment and this appeal ensued. A0793-A0796.

V. STANDARD OF REVIEW

This Court reviews a district court’s summary judgment determination under the law of the regional circuit. *Landmark Screens, LLC v. Morgan, Lewis, & Bockius, LLP*, 676 F.3d 1354, 1361 (Fed. Cir. 2012). The Fourth Circuit reviews a

district court's grant of summary judgment *de novo*. *Laber v. Harvey*, 438 F.3d 404, 415 (4th Cir. 2006).

This Court also reviews the ultimate determination of issues regarding patent-eligible subject matter under Section 101, indefiniteness under Section 112, and claim construction *de novo*. *AT&T Corp. v. Excel Commc'ns, Inc.*, 172 F.3d 1352, 1355 (Fed. Cir. 1999) (as to patentability); *Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355, 1366 (Fed. Cir. 2011) (as to indefiniteness); *Lighting Ballast Control LLC v. Philips Elecs. N. Am. Corp.*, 744 F.3d 1272, 1283 (Fed. Cir. 2014) (as to claim construction).

VI. STATEMENT OF FACTS

A. The Patents-in-Suit

1. U.S. Patent No. 7,603,382

The '382 patent is about providing customized webpages to information users using an advanced Internet interface. A0032, Title; A0041, 1:17-20 and 2:6-15. Invented in the Internet's "infancy" and its "rudimentary stages," the inventor, Gerald Halt, Jr., realized that rather than maintaining the paradigm of a one-size-fits-all web site display with static content, each user's display could be specifically tailored based on that user's profile and website navigation data. A0041, 2:1-26. Thus, Mr. Halt discovered and claimed a system for "delivering information from an information provider to an information user that is selectively

tailored towards the capabilities of the information provider and the needs of the information user.” *Id.* at 2:3-6.

Not only did the Internet allow for a form of mass distribution unlike anything before it, but also it was built on an architecture completely different from any previous media. A0041, 1:23-30. Without fully understanding how to exploit this difference, however, prior art web sites were designed as a replica of other print media, perhaps with animations or other enhanced graphics. *Id.* at 1:45-47 (“[T]he business community and the user community tend to view the Internet as a natural extension (or slight modification) of currently existing media.”).

But Mr. Halt understood that web sites could be much more because of the Internet’s unique architecture. *Id.* at 1:47-60. All previous forms of media were created at the point of origin. A commercial is produced and then broadcast. A flyer is printed and then distributed. Because of this everyone views the same thing. But web sites are made on each user’s computer immediately before being displayed based on instructions and content received from a web server. A0042, 4:27-61. Further, the web site can continue to receive information even after the user has arrived at the site, thus the site can be dynamically updated with new specifically tailored content. *Id.*

Thus, prior art web sites would only recreate a display universal for all users and would wait to receive a static resource from the server, be it an image or text,

in an attempt to mirror static web pages. A0042, 3:42-45 (“As shown, both the information users 12, 14, 16, 18 and the information providers 20, 22, 24, 26 are selectable and changeable entities; in contrast to the static entities that presently comprise the Internet.”). Websites that practice the invention of the ’382 patent, however, would be sent content based on the user’s personal profile and website data, and that user’s computer would then assemble the site using that content. *Id.* at 3:50-4:26. Thus, different content could be directed to different users to create different web sites.

The patent teaches to do this through data streams under the control of an interactive interface. A0042-43, 4:27-6:28. Figure 5A shows an example of this. A0038, Fig. 5A; A0043, 4:27-61. The web site would display the contents of the data stream, whatever they might be; the web site only had to know to expect the stream and how to display its contents. A0039, Fig. 5B; A0042, 4:44-50.

An interactive interface manages this process and decides what data to stream based on the user’s characteristics and website navigation data. A0043, 6:17-38. As shown in Figure 4A, a user profile is assembled in a database based on numerous pieces of data about the information user. A0036, Fig. 4A; A0042, 3:50-58. The preferred embodiment implements the interactive interface through a web page manager, which takes the user information and matches it against information identifiers to provide selectively tailored data streams. A0043, 6:22-

37. The information provider then displays “a virtual panoply of information” that may be thought of as a “mosaic of electronic tiles.” A0038 Fig. 5A; A0040, Fig. 7; A0042, 4:28-40. This requires a series of automatic and advanced computer instructions to intelligently decide what content should be presented based on the profile. A0043, 6:17-38. The manager will have to process the data, determining what should be analyzed, how to dynamically match the user’s profile to the best possible content, and properly deliver and display that content. *Id.* at 6:29-33.

The overall goal is to “selectively provide information to the information user . . . seamlessly.” *Id.* at 6:39-44. In this way, the interactive interface provides data for a web site depending on the needs of the user and the capabilities of the provider. A0041, Field of the Invention, 1:17-20.

IV asserted claims 1-5, 16, 17, 19, and 20-22 against Capital One. Claim 1 is reproduced below:

1. A system for providing web pages accessed from a web site in a manner which presents the web pages tailored to an individual user, comprising:
 - an interactive interface configured to provide dynamic web site navigation data to the user, the interactive interface comprising:
 - a display depicting portions of the web site visited by the user as a function of the web site navigation data; and
 - a display depicting portions of the web site visited by the user as a function of the user’s personal characteristics.

A0044.

2. U.S. Patent No. 8,083,137

The '137 patent is entitled “Administration of Financial Accounts” and claims priority to an application that was filed on July 10, 2002. A0058. The '137 patent provides a user-centric solution for monitoring financial accounts through a specific implementation of database technology. A0058, Abstract; A0062-A0066, Figs. 3A-7; A0067, 1:59-2:62; A0071, 10:4-15 (claim 5).

As Mary Tannenbaum (the sole inventor) points out, at the time of invention, consumers needed assistance in making purchasing decisions at the time of purchase and on a day-to-day basis. Ms. Tannenbaum found this to be a problem particularly in the instance when a purchaser has the use of a card issued to another person—*e.g.*, when a child has use of a parent’s card or an employee has use of an employer’s card. A0067, 1:48-52. This is because “such credit facilities [were] sometimes misused, or the balances [would] go too high, and by the time the employer learn[ed] of the problem it may [have been] too late to remedy the situation.” *Id.* at 1:52-55.

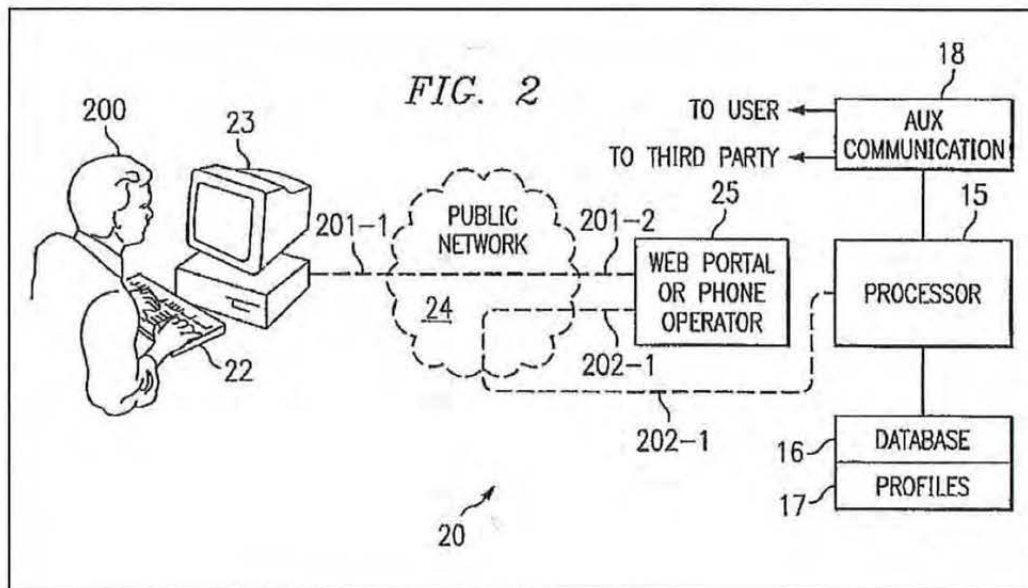
Ms. Tannenbaum also found that information regarding ultimate spending limits and current balances were insufficient to meet her goal of making informed purchasing decisions at the time of purchase. A0067, 1:24-38. Instead, purchasers needed information regarding their personal spending on a category-by-category basis in order to make informed buying decisions. A0067, 1:38-47.

Ms. Tannenbaum's new and unique technology-based approach to solving these problems is set forth in the '137 patent. Specifically, the '137 patent solves these problems by claiming a particular application of database and communications technologies to provide the timely information required to make informed purchasing decisions on the fly. Her technology stored user information in a user profile in the database that is keyed to the user's identity (as opposed to solely being keyed to an account) and tracked user-selected categories of transactions that include pre-set limits that are then communicated automatically to the user. A0068, 3:42-4:26; A0069, 5:48-7:16; A0071, 10:4-15 (claim 5).

The user profile contains one or more user-selected categories to track transactions associated with the user identity. *See, e.g.*, A0062-A0066, Figs. 3A-7 (and corresponding text); A0067, 2:9-35. And one or more user-selected categories include a user pre-set limit. *Id.* The invention further requires communicating "transaction summary data" (which contains at least one user-selected category's pre-set limit) to the user. A0060, Fig 1; A0068, 3:55-67, 4:14-19; A0071, 10:4-15 (claim 5). To solve the issues at hand, Ms. Tannenbaum discovered that it was of paramount importance to store, in a database, a profile that is keyed to a user identity as opposed to solely keying user information to the account number. A database configured in this way allowed "consumer users to establish self-imposed limits on the user's spending (borrowing) such that when

the limit is reached the consuming user is notified” either “before, during or after the point of sale transaction.” A0067, 1:66-2:8.

The invention is depicted in Figure 2 of the '137 patent. A0061.



In the context of Figure 2, “[p]rocessor 15, in conjunction with database 16 and profiles 17, . . . categorizes the various purchases being made and stores those purchase amounts and categories in database 16, according to profiles of user 17, as stored, for example, in profile data base 17.” A0068, 3:47-52. “[T]hese profiles can include not only the budget amounts for each category, but what types of items would fit into the different categories.” *Id.* at 3:53-55. Transaction summary data can then be communicated to the user or a third party. *Id.* at 3:55-67.

IV asserted claims 5-11 against Capital One. Claim 5—the only independent claim—is reproduced below:

5. A method comprising:

storing, in a database, a profile keyed to a user identity and containing one or more user-selected categories to track transactions associated with said user identity, wherein individual user-selected categories include a user pre-set limit; and

causing communication, over a communication medium and to a receiving device, of transaction summary data in the database for at least one of the one or more user-selected categories, said transaction summary data containing said at least one user-selected category's user pre-set limit.

A0071.

3. U.S. Patent No. 7,260,587

The '587 patent was developed by Eastman Kodak Company and claims an invention that can automatically organize digital images made from scanning hard copy documents in accordance with predetermined criteria. A0074, Abstract; A0113, 20:13-29; A0114, 21:17-22:16. The Kodak inventors developed an invention that stores the images and categories on a digital storage medium and can further provide a product incorporating the images. *Id.* at 20:26-29, 22:16-17. Machine-readable instruction forms provide category information for organizing the images. *Id.* at 20:18-25, 22:4-12. The specification teaches that these forms can be hard copy, audio or visual signals, or computer code. A0106, 6:43-49; A0109, 12:14-23; A0110, 13:18-25.

The invention encompasses a wide range of embodiments, including automatic organization methods that are implemented on a networked system 330 depicted in Figure 22, which also appears on the front of the '587 patent.

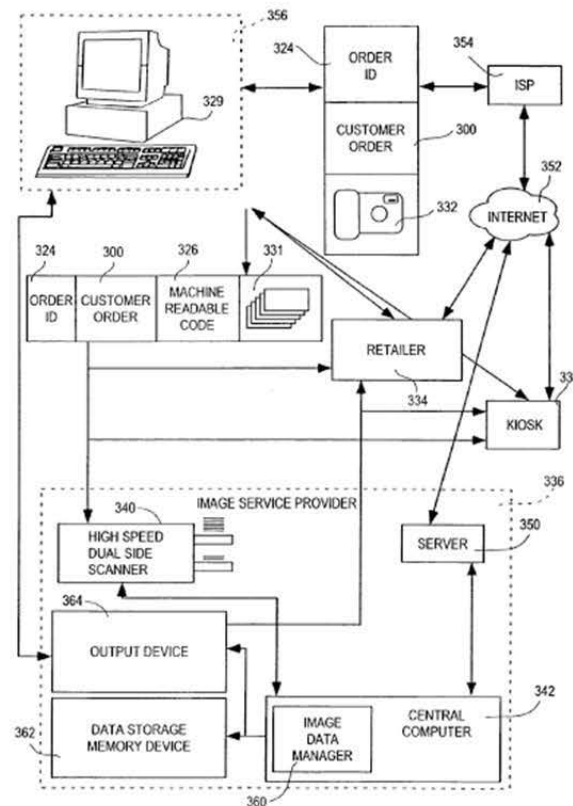


FIG. 22

A0100.

In such situations, the customer may simply provide a group of images and some criteria upon which the images are to be grouped such as selecting an image of a particular individual, place, or thing. Innovative computer programs can then automatically group the images in accordance with the selected criteria. A110, 14:6-15. Or automatic sorting and grouping can be based on other characteristics of the original hard copy prints, such as a particular size or shape (for example

square versus rectangle), a white border around the image, serrated edges on the print, and a print date provided on the front or back side of the print. *Id.* at 14:31-43. Similarly, the '587 patent discloses examples of instructions and forms that are machine-readable, including Internet-based Hypertext Markup Language (HTML) forms, instructions in audio or visual format, forms that can be automatically scanned, instructions provided on a computer readable medium, or software from a service provider. A0106, 5:35-40, 6:1-5, 6:39-40, 6:46-47. For example, order form 300 of Figure 21 is shown as a hard copy form but “can equally be provided on a computer screen and associated with a computer for forwarding the customer order electronically to a retailer or image service provider” A0109, 12:17-23.

IV asserted independent claims 1 and 18 against Capital One. Claim 1 is reproduced below:

1. A method of automatically organizing digital images obtained from a plurality of hard copy prints, each of said hard copy prints having an image thereon, comprising the steps of:

digitally scanning a plurality of hard copy prints that have been grouped into one or more categories, each category separated by an associated machine readable instruction form as to obtain a digital file of each of said images and digitally associating one or more categories with said digital images in accordance with said associated machine readable instruction form executed by a computer;

storing said digital images files and associated categories on a digital storage medium; and

producing a product incorporating images from one or more of said categories as requested by a customer.

A0113.

**B. The District Court’s Order
Regarding Infringement of the ’587 Patent**

On December 18, 2013, the district court rendered its Claim Construction Order. With respect to the ’587 patent, the district court explained that its construction of a “machine readable instruction form” required “a hard copy form that is presented and scanned along with the hard copy images and which physically separates the categories of images, as defined by a user.” A0760.

Based upon this holding, IV stipulated to non-infringement of the ’587 patent and moved for entry of judgment of non-infringement. A0761-A0776. The district court then entered judgment of non-infringement of the ’587 patent by Capital One on January 23, 2014. A0777-A0778.

**C. The District Court’s Summary Judgment Order
Regarding the Patentability of the ’382 and ’137
Patents and the Definiteness of the ’382 Patent**

As set forth above, the district court found both the ’382 patent and the ’137 patent invalid under Section 101 on summary judgment.¹ A0780-A0785.

¹ Capital One had previously moved to dismiss all five patents-in-suit on the grounds of unpatentability under Section 101. A0797. The district court denied the motion to dismiss and later a motion dismiss on the pleadings. *Id.* Capital One later moved for summary judgment on Section 101 grounds with respect to the two

Continued . . .

The district court began its Section 101 analysis by noting the parties' respective positions. A0781-A0784. For the '382 patent, Capital One argued that the '382 patent claims the abstract idea of "personalizing a website display to reflect a user's characteristics and navigation history." A0783. IV argued that this, in and of itself, is not abstract, and that the '382 patent claimed a particular machine that was a "specific application of customized web page technology." A0783-A0784.

Capital One asserted that the '137 patent covers the abstract idea of "budgeting." A0781. IV argued that the '137 patent covers a specific application of database technology for electronically administering financial accounts where the database has profiles that are keyed to a user identity and where transaction data is then communicated to a device. *Id.*

The district court then discussed both patents simultaneously and found that both were drawn to mental processes (that could be done in the absence of a computer) and that neither embodied an inventive concept or claimed a specific application. A0784-A0785. The district court also found that neither patent passes

... continued

patents that remained at issue—the '382 patent and the '137 patent. A0780-A0785.

the machine-or-transformation test ² and each only involved “the mere manipulation or reorganization of data.” *Id.* With respect to the ’382 patent, the district court found that, at most, it describes a more efficient system for “determining what would appeal to a particular user from a particular website.” A0785. With respect to the ’137 patent, the district found that, at most, it describes a more efficient system for “monitoring expenditures according to preset limits.” *Id.*

The district court also held that the ’382 patent claim term “interactive interface” is indefinite. A0785-A0791. The court had already construed the term to mean: “a selectively tailored medium by which a web site user communicates

² In addition to finding that the patents did not pass the machine-or-transformation test, the district court noted that the patents do not claim “‘patentable’ processes under § 100(b)” and cited to *Bilski* for this proposition. A0784 (citing *Bilski v. Kappos*, 561 U.S. 593, 611-12, 130 S. Ct. 3218, 3231 (2010)). While not entirely clear, it appears that the district court was holding that the processes claimed abstract ideas, as *Bilski* did, and not that the processes were not “processes” within the broad definition of § 100(b)—a question which the *Bilski* Court found unnecessary to address. Capital One did not dispute that the ’382 and ’137 patents were directed to a “process, machine, manufacture, or composition of matter,” and, setting aside the statement above, the district court made no such finding either. There is no legitimate argument that these patents do not fit into one of the categories; the only issue is with whether a judicially created exception to these categories applies. This common scenario was present where the *Alice Corp.* Court acknowledged such in its opinion. “There is no dispute that a computer is a tangible system (in § 101 terms, a ‘machine’), or that many computer-implemented claims are formally addressed to patent-eligible subject matter.” *Alice Corp. v. CLS Bank Int’l*, 573 U.S. —, 134 S. Ct. 2347, 2358-59 (2014).

with a web site information provider.” A0786. Then based on its own construction, the court found that “medium” has no meaning within the context of the patent, and therefore the term is indefinite. A0785-A0791.

VII. SUMMARY OF THE ARGUMENT

There are four issues in this appeal.

The first two are whether the ’382 and ’137 patents claim eligible subject matter. Both do. The ’382 patent is about customizing content on a website through a software-implemented interactive interface and based on the user’s personal characteristics and website navigation data. This is not an abstract concept. It is specific. Indeed, it is so specific the district court did not raise any concerns of preemption. Further, the claims are limited to a particular technological environment that uses a user profile comprised of personal characteristics and website navigation data, stored on the user’s station and transferred to a web server, to compare against a database to automatically choose selectively tailored content for that individual user, and then return that content through data streams that allow the content to be properly formatted and displayed. These limitations add significant meaning to the claims.

Second, the ’137 patent claims using database technology to administer financial accounts and automatically communicate transaction information to users. This is not an abstract concept. Instead, like the patent at issue in *Diamond v.*

Diehr, 450 U.S. 175 (1981), the patent’s inventor, Mary Tannenbaum, solved a technological problem in a “conventional industry practice.” *See id.* at 177-78. Her invention, however, is far from conventional. She provided the financial services industry a solution of administering accounts by providing purchasers information to assist with their spending decisions and did so by using specific technologies in conjunction with numerous claimed steps. Even if this were abstract, the limitations require electronically tracking transactions or spending within user-defined categories in a particular way in an electronic database where the profiles are keyed to a user identity and contain pre-set limits of associated user-selected categories. These limitations add significant meaning to the application and narrowly bound the invention so as to alleviate any concerns of preemption.

Third, the ’382 patent’s claim term of “interactive interface” is not indefinite. The district court improperly found that “medium”—not a claim term, but part of the court’s own construction—was insolubly ambiguous. The court should have instead focused on the claim terms themselves as taught by the specification. Further, one of skill in the art would understand both “interactive interface” and “medium” to be well defined by the intrinsic evidence. The interactive interface is software-enabled to provide the user with specifically tailored content. It does so through the use of user profiles uploaded to and

compared against a database to provide appropriate content for the user based on their personal characteristics’ and web navigation history. It then returns the content to the user through data streams that are specifically formatted so the user’s web page can properly display the content.

Fourth, the district court improperly construed “machine readable form” in the ’587 patent to require a “hard copy form” that is physically scanned. The machine-readable form provides instructions to automatically categorize the documents. The court’s construction improperly excludes taught embodiments that use software instructions as a “machine readable form.”

VIII. ARGUMENT

A. The District Court Erred in Finding That the ’382 and ’137 Patents Claim Unpatentable Abstract Ideas Under 35 U.S.C. § 101

Determining whether claims are patent-eligible under a Section 101 inquiry is a two-step process.

First, the Court must determine “whether the claims at issue are directed to a patent-ineligible concept.” *Alice Corp. v. CLS Bank Int’l*, 573 U.S. —, 134 S. Ct. 2347, 2355 (2014). This requires identifying whether the patent claims a law of nature, a natural phenomena or an abstract idea, as opposed to a “patent-eligible application of those concepts.” *Id.* Only if the claims are directed to an ineligible concept is the second inquiry considered. *Id.*

The second inquiry “consider[s] the elements of each claim both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent-eligible application.” *Id.* (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. —, 132 S. Ct. 1289, 1297-98 (2012)). This involves “a search for an ‘inventive concept’—*i.e.*, an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.” *Id.* (quoting *Mayo*, 132 S. Ct. at 1294).

Section 101 is a “coarse filter” because “the concern that drives th[e] exclusionary principle [is] one of preemption.” *Alice Corp.*, 134 S. Ct. at 2354. Specifically, where use of the claimed “approach in all fields, [] would effectively grant a monopoly over an abstract idea.” *Bilski*, 561 U.S. at 611-12, 130 S. Ct. at 3231.

Moreover, as the Supreme Court has repeatedly cautioned, courts must “tread carefully in construing the exclusionary principle [of Section 101] lest it swallow all of patent law.” *Alice Corp.*, 134 S. Ct. at 2354 (citing *Mayo*, 132 S. Ct. at 1293-94). This is because “[a]t some level, all inventions . . . embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.” *Id.* (quoting *Mayo*, 132 S. Ct. at 1293). And it is clear that “applications” of such concepts are patent eligible. *Id.*; *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972).

It is against this backdrop that the asserted claims of the '382 patent and the '137 patent must be measured.

1. The Claims of the '382 Patent Are Not Directed or Drawn to an Abstract Idea

Contrary to the district court's finding, the asserted claims of the '382 patent are not directed to an abstract idea. A0784-A0785. In *Alice Corp.*, the Supreme Court described "abstract ideas" as the "building blocks of human ingenuity" (*Alice Corp.*, 134 S. Ct. at 2354 (quoting *Mayo*, 132 S. Ct. at 1294)) and as a "fundamental . . . practice" (*Id.* at. 2356-57). The claims of the '382 patent are directed to customizing content on a website through a software-implemented interactive interface and based on the user's personal characteristics and website navigation data. A0041, 2:1-26. This is not a building block of human ingenuity or a fundamental practice. Rather, it is a novel, innovative, and specific application of providing content for web page display.

At issue are not the broad, fundamental principles claimed in *Bilski* and *Alice Corp.* The patents-at-issue there claimed hedging and intermediated settlement, respectively, and nothing more. *Bilski*, 561 U.S. at 611, 130 S. Ct. at 3229-31; *Alice Corp.*, 134 S. Ct. at 2355. Those were "fundamental economic practice[s] long prevalent in our system of commerce." *Alice Corp.*, 134 S. Ct. at 2356. The same cannot be said here.

The abstract concept at issue, if any, would be delivering data or content to web users—something far broader than what is claimed. Just by using the medium of the Internet, the patent is limited to a particular type of content delivery. Doing so by sending selectively tailored data with an interactive display is a very specific application of data delivery in general, and on the Internet in particular. This is especially true where the tailoring is a function of both navigation data and a user’s personal characteristics, being sent by data streams, and in response to user profiles stored in a database. *See, e.g.*, A0044, claims 1, 5, 16, and 21.

Nor is this a long-standing idea. The inventor, Mr. Halt, points out several times in the background of his invention that this was a new and unique approach to media distribution and consumption borne out of the Internet’s infancy. A0041 at 1:37-43. Compared to the age-old concept of hedging at issue in *Bilski*, or in *Alice Corp.*, where the Court cited an 1896 publication that confirmed the notion of intermediated settlement was known in commerce for over a century, the concept at issue here was untried and innovative. *Alice Corp.*, 134 S. Ct. at 2356 (citing 1896 publication as support for proposition that intermediated settlement was a fundamental economic practice long prevalent in our system of commerce).

The Court’s concern of what is abstract is “undergirded” by its paramount concern of preemption. *Alice Corp.*, 134 S. Ct. 2354-55 (stating that as between abstract ideas and “something more” that “the former would risk

disproportionately tying up the use of the underlying ideas, and are therefore ineligible for patent protection. The latter pose no comparable risk of pre-emption, and therefore remain eligible for the monopoly granted under our patent laws.”) (internal quotations and citations omitted); *see Mayo*, 132 S. Ct. at 1294-98; *Benson*, 409 U.S. at 71-72; *Parker v. Flook*, 437 U.S. 584, 594-95 (1978). No preemption concerns arise in the context of the ’382 patent. It does not cover all ways of deploying web pages to users, or even all ways of deploying customized content to users. Rather, only those systems and methods that use the claimed interactive interface to provide specifically tailored content based upon the user’s web site navigation data and the user’s personal characteristics are within the metes and bounds of the claims. The claims require an interactive interface to display content relating to a user’s web site navigation data *and* a user’s personal characteristics; display this selectively tailored content through data streams; and determine the content based on user profiles matched against a database. A0044, claims 1, 5, 16, and 21. This is a very specific application of recent technology that provides dynamic, interactive and individualized content to users. A0041, 2:1-26.

Though the district court never explained its basis for selecting what it believed was the claimed abstract idea, the district court deemed it to be “determining what would appeal to a particular user from a particular website.”

A0785. But this is not what is claimed. There is no limitation in the claims about content appealing to a user, either implied or explicit. The claims at issue are more precise. For example, independent claim 1 requires an interactive interface that selectively tailors content based on a user's navigation data and characteristics. A0044. Independent claim 16 requires these limitations plus receiving a user profile, storing the profiles in a database, and transferring the data for analysis to provide selectively tailored content. *Id.* And independent claim 21 requires sending a data stream that is constructed based on a stored user profile and displaying the selectively tailored content through the interactive interface. *Id.* These specialized interfaces dynamically change based on multiple user-specific inputs. *Id.* And even by the court's broad, albeit erroneous, understanding of what was claimed, this articulation does not give rise to a preemption concern. The court expressed no such concerns and made no such finding.

Capital One asserted below that "personalizing a website to reflect a user's characteristics and navigation history" is an abstract concept. A0783. Not so. Even accepting this as the claimed concept, this is not abstract. As explained above, this is not a fundamental concept or building block underlying human ingenuity. In trying to manufacture abstraction where none exists, Capital One also ignores the claim limitations set forth above. Nor could preemption be an issue even by Capital One's articulation of the claims, because only websites that

are personalized based upon user characteristics *and* navigation history are covered. *Alice Corp.*, 134 S. Ct. at 2354.

The '382 patent simply does not claim an abstract idea.

**a) Assuming the '382 Patent Claims an
Abstract Idea (It Does Not), the Claimed
Limitations Recite Significantly More**

Because no abstract idea is actually claimed, the Court's analysis need go no further. The second inquiry set forth in *Alice Corp.* applies only if the '382 patent claims an abstract idea. *Alice Corp.*, 134 S. Ct. at 2355. Even assuming it did, however, the claims are to an innovative concept and require using computer technology in a particular way as to add significantly more, making the claims eligible under Section 101.

Here, the Court must then “examine the elements of the claim to determine whether it contains an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application.” *Alice Corp.*, 134 S. Ct. at 2357 (quoting *Mayo*, 132 S. Ct. at 1294, 1298). In order to pass this test there must be “‘additional features’ to ensure ‘that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].’” *Id.* (quoting *Mayo*, 132 S. Ct. at 1297). In this regard “*Mayo* made clear that transformation into a patent-eligible application requires ‘more than simply stat[ing] the [abstract idea] while adding the words ‘apply it.’” *Id.* (quoting *Mayo*, 132 S. Ct. at 1294). Moreover, “the mere

recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention.” *Alice Corp.*, 134 S. Ct. at 2358.

The district court held that no inventive concept was claimed. A0784. But a review of the specification spells out the inventive concept: delivering customized web page content through an interactive interface as a function of navigation history and user characteristics. A0041, 2:1-26. The inventive concept was realizing that, unlike any other form of media, because a web page is made only when a user is about to see it, and is made separately for each user and continually updated, it could be uniquely designed to provide dynamic, personalized, and updated content to a user. *Id.*; A0042-43, 3:40-6:48. This concept was novel at the time of the ’382 patent.³

Similarly, the claims are meaningfully limited and add “something more” to the idea of delivering content or even personalized content. As explained above, the invention is achieved by creating and managing streams of data as opposed to static content, delivering that content to the user, and then creating an individualized instance of a web site. A0042, 3:40-4:26.

³ Whether another came up with the idea first or the idea was obvious based on what was available in the art are, of course, questions for Sections 102 or 103. But there can be no dispute that as a general matter, this was a new idea using new technology, and not something abstract or long standing.

With reference to claim 1, the claimed invention must have an interactive interface that can provide dynamic web page content to the user. A0044, 7:13-22. Moreover, the web pages that are displayed via the interactive interface must always include: (1) portions of a web site visited by the user as a function of the navigation history; *and* (2) portions of a web site visited by the user as a function of the user's personal characteristics. *Id.* The interactive interface uses data streams with information identifiers to provide displays. The interactive interface then displays the data, with the website using the information identifiers to configure and position the dynamic data. A0042, 4:27-61; A0043, 6:18-38; *see, e.g.*, A0044, claims 1 and 5. The selective tailoring is done in response to user information received from the user's computer and matched against information stored in a database. *Id.*; *see, e.g.*, A0044, claims 16 and 21.

The meaningfulness of the claims is buttressed by the specification's teaching of "a *specific way* of doing something with a computer." *CLS Bank Intern. v. Alice Corp. Pty. Ltd.*, 717 F.3d 1269, 1302 (Fed. Cir. 2013) (emphasis in original).⁴ In this regard, "[a] special purpose computer, *i.e.*, a new machine" is something that is "specially designed to implement a process" and may be

⁴ The Supreme Court discussed that one cannot save a claim to an abstract idea by simply stating "apply it with a computer" (*Alice Corp.*, 134 S. Ct. at 2358) and left undisturbed the discussion in Judge Rader's opinion concerning a specific machine.

sufficient under Section 101. *Id.* (citing *In re Alappat*, 33 F.3d 1526, 1545 (Fed. Cir. 1994) (holding that “programming creates a new machine, because a general purpose computer in effect becomes a special purpose computer once it is programmed to perform particular functions pursuant to instructions from program software”). Here the “patent does more than simply instruct” one to perform an abstract idea “on a generic computer.” *Alice Corp.*, 124 S. Ct. at 2359. It teaches using a specific system and method of receiving and transmitting data. Indeed, these steps were not “purely conventional” at the time the patent was filed. *See id.* If they were, others would have been routinely creating dynamic websites. The ’382 patent claims a special purpose computer and methods that are carried out by a special purpose computer.

Finally, the claims also are not drawn to mental processes as the district court held. A0785. The technology claimed by ’382 patent cannot be performed by a human, either in one’s mind or otherwise. To provide dynamic web page content over a network requires computer hardware, software, and specific algorithms analyzing profiles and navigation data and matching the results against records in a database. One can envision or discuss the idea, at a high level, but one cannot perform it without very advanced, specific technology.

For the foregoing reasons, even if the district court properly concluded the ’382 patent claims an abstract idea, the additional, inventive features limit what is

claimed to a specific application and the '382 patent is patent eligible under Section 101.

2. The Claims of the '137 Patent Are Not Directed or Drawn to an Abstract Idea

The district court analyzed the '137 patent in tandem with the '382 patent and similarly did not articulate any basis for its selection of an abstract idea nor elaborate on any concerns of preemption. Nor could it. The claims of the '137 patent are directed to using database technology to administer financial accounts and automatically communicate transaction information to users. The claims are directed to electronically tracking transactions or spending within user-defined categories in a particular way of using an electronic database where the profiles are keyed to a user identity and contain pre-set limits of associated user-selected categories.

Neither the concept of electronically tracking transactions nor the claimed application is an abstract ideas. These are not building blocks of human ingenuity or fundamental principles. There is no long-standing, fundamental precept of a computer automatically notifying a customer of transactions, based on a user profile keyed to a user identity, with a pre-set limit set by a user associated with spending categories, and having summary data notifying the user that includes the pre-set limit. Yet these are the limitations required to practice the invention. *See* A0071, claim 5.

Capital One argued the patent was directed to “budgeting” and undoubtedly that is an abstract concept.⁵ The invention, however, is directed to solving problems with budgeting and financial account administration. As Ms. Tannenbaum points out in the specification, consumers needed assistance in making purchasing decisions at the time of purchase and on a day-to-day basis, particularly when a purchaser has the use of a card issued to another person or a business. *See, e.g.*, A0067,1:48-55.

That the problems to be solved were fundamental or abstract does not mean the patent itself is abstract where, as here, the solution claimed is new, specific, and unique. The ’137 patent teaches configuring a database in a specific, user-centric way to store specific types of criteria and melding that database technology with communication technology to automatically inform users of certain spending events based on a customer’s profile and selected preset limits. Thus, the patent claims a specific and automatic method of electronically monitoring transactions and providing electronic notification—an invention that is only possible due to very recent technology. Without these advances in technology, a financial

⁵ Despite arguing that the patent claims “budgeting” in the context of § 101, Capital One’s non-infringement arguments never focused on whether or not its accused products “budget.” Rather, they were based on precise computer applications and whether their database was keyed in the manner required by the claims. Similarly, Capital One’s non-infringement positions for the ’382 patent also centered on whether their system satisfied the precise technology claimed.

institution could not hope to provide its customers with such automatic or real-time information without expending a massive amount of manpower.

The claimed solution is similar to that in *Diehr*, where the inventors applied known technologies in a specific way “designed to solve a technological problem in ‘conventional industry practice.’” *Alice Corp.*, 134 S. Ct. at 2358 (quoting *Diamond v. Diehr*, 450 U.S. 175, 177-78 (1981)). At issue in *Diehr* was a known mathematical formula being programmed into a generic computer to address industry problems of curing synthetic rubber. “[The inventors’] process admittedly employs a well-known mathematical equation, but they do not seek to pre-empt the use of that equation. Rather, they seek only to foreclose from others the use of that equation in conjunction with all of the other steps in their claimed process.” *Diehr*, 450 U.S. at 185-87. Here, Ms. Tannenbaum sought to solve the technological problem in the financial services industry of administering accounts by providing purchasers information to assist with their spending decisions on a day-to-day basis. She did so by using specific technologies in conjunction with numerous claimed steps. A0071, claim 5.

The ’137 patent claims cannot be ruled abstract if *Diehr*’s holding is to endure. Such narrowly drawn claims do not give rise to any legitimate preemption concern. There is no threat that the patent could tie up “budgeting” in general, “budgeting” with a computer, or even of notifying users of transaction information.

Instead, all that is tied up are those computer systems or methods that use a specific type of database (containing “a profile keyed to a user identity”) that has specific information (“user-selected categories” and “pre-set limits”), and that automatically track and communicate specific summary data (“containing the pre-set limit”), such as that used by Capital One. A0071, claim 5.

The district court found that the ’137 patent claimed “monitoring expenditures according to preset limits” and consists of nothing more than the “manipulation or reorganization of data.” A0785. Not only is this not abstract according to the Court’s guideposts in *Alice Corp.*, it ignores much of what is actually claimed.⁶ Only one specific way of “monitoring expenditures according to present limits” is claimed and requires the numerous limitations discussed already.

The ’137 patent does not claim an abstract idea.

**a) Assuming the ’137 Patent Claimed
an Abstract Idea (It Does Not), the
Claim Limitations Recite Significantly More**

As with the ’382 patent, because the ’137 patent does not claim nor is it directed to an abstract idea, it survives Section 101 and the Court need go no

⁶ No case holds that “manipulation or reorganization of data” is *per se* abstract. Certainly one could invent a novel and useful way of doing so in a computer or otherwise or apply known techniques in a new way to solve a problem directed to a particular industry, as in *Diehr* and as done by the Ms. Tannenbaum in the ’137 patent.

further. But assuming that the Court does find that electronically tracking transactions or spending within user-defined categories is abstract or the patent is directed to some broader concept, the '137 patent claims are meaningfully limited to a meaningful application and provide an inventive concept that adds significantly more to any broad concepts at issue.

As explained above, the patent teaches and claims the ability to store a profile keyed to a user identity (as opposed to solely an account number or some other identifier) in a database. A0071, claim 5. This keyed profile can then be used to track user-selected categories to track transactions and transaction summary data, which in turn is sent to a user's device when a transaction exceeds a user pre-set limit. *Id.*

The district court found that there was no inventive concept claimed. IV disagrees. The inventive concept was providing a system that allowed people to make informed purchasing decisions on a day-to-day basis with the benefit of information on-the-fly from a remote electronic database that was keyed to their profile and can communicate particular categorized spending information to their receiving devices. Keying a profile to a user identity rather than solely to a bank's account is essential here, otherwise the cardholder might receive and ignore this important information.

Perhaps now this solution seems simple, as so many do through hindsight's perfect vision, but that is not what is at issue. What is at issue is whether the solution is meaningfully applied and inventive.⁷ The claims and specification show both to be true. The claims, directed to a specific industry and application through numerous and narrow limitations, employ a clever way of organizing, monitoring, and communicating automatically with financial account customers. Certainly, Capital One has failed to prove otherwise.

While it is unclear, to the extent the district court articulated what it believed was the abstract idea, it seems that the district court found that the claims were directed to "monitoring expenditures according to preset limits." A0785. The '137 patent does much more than monitoring expenditures according to preset limits. To suggest otherwise is to ignore the claim limitations and perform a Section 102 or 103 analysis in the context of Section 101, which is improper. There are many ways one could monitor expenditures, including a checkbook. But that is not what the '137 patent claims is inventive and novel.

The proper scope of the invention could have been better understood had the district court construed: "storing, in a database, a profile keyed to a user identity and containing one or more user-selected categories to track transactions

⁷ Of course, what is inventive and what is novel must be two separate questions under Sections 101 and 102, respectively.

associated with said user identity” as IV proposed. But without explanation or analysis, the court refused to do so. A0759. Properly construed, the “storing” phrase means “storing, in a computer-based database, a computerized database record of parameters including user-created control information identifiable by a computer using a unique value associated with a user identify.” A0750. That the invention is computer implemented cannot be disputed. Each and every embodiment is implemented by one or more computers. A0067-A0071, 1:18-9:29. Furthermore, in computer science (the field of the invention), technical dictionaries confirm IV’s construction and that the claimed invention is necessarily a special purpose computer. *See, e.g., Alappat*, 33 F.3d at 1545 (“[A] general purpose computer in effect becomes a special purpose computer once it is programmed to perform particular functions pursuant to instructions from program software.”). For example, a “database” in the field is a “collection of logically related stored data stored together in one or more computerized files.” A0148; A0253; A0257; A0261. A “key” is a “field in a database that identifies the record in that database.” A0148; A0253; A0258; A0261. The specification and technical dictionaries repeatedly confirm that a “profile” is a “unique value associated with a user identity.” A0068, 3:47-52; A0069, 6:45-51; A0070, 7:48-50; A0149; A0262. These definitions of “database,” “key” and “profile” confirm the presence of

specific applications of technology upon which the limitations of the '137 patent claims are built.

Moreover, the patent claims and the specification teach more than simply saying take a solution and apply it with a computer. Unlike the patent at issue in *Alice Corp.*, the patent claims here contain “express language to define the computer’s participation.” *See Alice Corp.*, 134 S. Ct. at 2359 (quoting J. Lourie’s concurrence in *Alice Corp.*, 717 F.3d at 1286). The explicit language of claim five requires a specific type of database—one storing “a profile keyed to a user identity.” The profiles must contain the specific information of “user-selected categories” and “pre-set limits.” The system automatically tracks and communicates to a “receiving device” specific summary data to the account owner, which contains “the pre-set limit.” Further, the limitations are not “purely conventional” or “generic.” *Id.* These are not elements that would be included with “nearly every computer.” *Id.* at 2360. Indeed, very few computer systems would have a database, even fewer would have databases programmed in this particular manner, and still fewer would provide the particular summary data automatically to a receiving device. The claims are far more exacting than simply linking a broad concept to “a technological environment” that is “computers.”⁸ *Id.*

⁸ For these same reasons, IV disputes the district court’s findings that the claims are “directed to mental processes.” A0784. One’s mind does not contain

Continued . . .

For the foregoing reasons, even if the '137 patent does claim an abstract idea, the specific, meaningful claim limitations that add inventive features to the idea make the claims eligible under Section 101.

**B. The District Court Erred in Finding That the Term
“Interactive Interface” in the '382 Patent Is Indefinite**

The district court ruled that the term “interactive interface” was indefinite under Section 112 because, as construed, the phrase “selectively tailored medium” did not precisely define the scope of the claims. A0788-89. In other words, the district court did not find that “interactive interface” was itself indefinite, but that its construction was indefinite. *Id.* During claim construction, the court essentially adopted IV’s proposed construction, over Capital One’s indefiniteness objection. A0756. Then during summary judgment, the district court adopted Capital One’s indefiniteness position, found that the patent did not describe what the “medium” was and thus “medium” was insolubly ambiguous. A0788. From that, it could not determine what was being “selectively tailored.” A0789-90.

. . . continued

specifically programmed databases capable of storing user profiles or broadcasting summary data over a communications medium. As with the '382 patent, it is possible to think about the claims and the issues involved (as one can with any patent or idea, no matter how abstract or concrete) but it can only be practiced using a specific technological scheme—not in one’s head or with a pen and paper.

Since the district court's decision, the Supreme Court has clarified the indefiniteness standard: "[W]e hold that a patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.*, – U.S. –, 134 S. Ct. 2120, 2124 (2014). Under either standard, however, the district court erred in finding the '382 patent indefinite.

First, the court should have analyzed the claim language itself, rather than finding its own construction of the term ambiguous. Second, even if the court's approach were proper, "selectively tailored medium" is sufficiently definite in light of the intrinsic evidence from the perspective of one of skill in the art. It is the software and web server that select and deliver customized web page content based on an individual user's personal characteristics and website navigation data.

1. The District Court Should Have Analyzed the Claim Language Itself

The district court only analyzed its construction of "interactive interface."⁹ It never addressed whether the actual term "interactive interface" fails to reasonably inform one of skill in the art as to the term's scope. Rather, it found

⁹ The court construed "interactive interface" as "a selectively tailored medium by which a web site user communicates with a web site information provider." A0756.

that “medium” was insolubly ambiguous—not a claim term, but part of its construction. A0788. But even before the Supreme Court’s holding in *Nautilus*, the indefinite test was never whether a construction was insolubly ambiguous; it was whether the claim language was so. The statute and case law make clear that the claim language itself is the touchstone for indefiniteness. 35 U.S.C. § 112, ¶ 2 (stating that a patent must “conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as [the] invention”); *Nautilus*, 134 S. Ct. at 2124.

Initially, the claim construction issue between the parties was whether “interactive interface” refers to the distribution and management of data streams as proposed by IV or whether it is a user station with a display screen, as Capital One proposed. A0748. The court adopted most of IV’s proposed construction and said: “In this regard, the Court concludes that Capital One’s proposed construction is overly broad, that the ‘interactive interface’ is the medium itself, and that the word ‘advanced’ is used to describe only the internet interface, of which the ‘interactive interface is only a part.” A0756.¹⁰

¹⁰ The word “advanced” had been proposed by IV because the Summary of the Invention provides: “Accordingly, it is an object of the invention to provide an advanced Internet interface between Internet information users and Internet information providers.” A0041, 2:21-23.

The court's responsibility during claim construction is to define the meaning and scope of the claims. "The purpose of claim construction is to 'determine the meaning and scope of the patent claims asserted to be infringed.'"¹¹ *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., Ltd.*, 521 F.3d 1351, 1360 (Fed. Cir. 2008) (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995)). Further, it is a basic principle of claim construction that "claims should be so construed, if possible, as to sustain their validity." *Rhine v. Casio, Inc.*, 183 F.3d 1342, 1345 (Fed. Cir. 1999); see *Tate Access Floors v. Interface Architectural Res.*, 279 F.3d 1357, 1367 (Fed. Cir. 2002).

The district correctly recognized that the scope of "interactive interface" as being directed to how the selectively tailored information is managed. But the court should not have defined a claim term with language that it believed had no "specific structure or scope" and could not be reasonably understood. A0789-90. Capital One argued that IV's claim construction was indefinite in its claim construction brief and IV opposed that. A0281. IV believed that implicit in the

¹¹ This case illustrates that there is perhaps little practical difference between the Federal Circuit's prior case law and the Supreme Court's recent enunciation of indefiniteness. The challenge of claim construction is to put into words how one of skill in the art would understand the scope of a claim. If that cannot be done, then most likely the claims fail to inform those of skill in the art with reasonable certainty. On other hand, if one can express through claim construction how one of skill in the art would understand the claims, then it should inform those of skill with reasonable certainty.

court's acceptance of IV's construction was its acceptance of IV's argument that the claim scope was clear. If that was not the case, the court should have addressed the issue during claim construction to determine if a narrower or different construction would have rendered the term definite.

1. The District Court's Construction Was Not Indefinite

Even if the district court's approach is correct, it is error to find "interactive interface," as construed, indefinite. The claimed "interface"—the means by which communication occurs—connects the information users with the information providers. It is "interactive" because (1) the interface is configured to provide dynamic website navigation data and (2) the interface displays customized web content based on the particular characteristics of a user as well as the user's website navigation data. The Summary of the Invention describes this aptly:

The present invention is a system for delivering information from an information provider to an information user that is selectively tailored toward the capabilities of the information provider and the needs of the information user. ***The system includes an interactive interface which provides a medium for information users to communicate with information providers. More specifically, the system includes means for the information user to tailor the profile of the information user depending upon the needs or desires of the information user.*** Separate means permit the information provider to view the information user profile and to structure the information seen by the information user in a format that is most suitable to that information user.

A0041, 2:1-15 (emphasis added). Thus, the interactive interface is the "medium for information users to communicate with information providers . . . to tailor the

profile of the information user depending upon the needs or desires of the information user.” *Id.* In other words, the “interactive interface” is tasked with tailoring the information and providing it to the user. The claims bear this out as well. Independent claim 1 requires the interactive interface to provide the “display depicting portions of the website. . . as a function of the web site navigation data” and “as a function of the user’s personal characteristics.” Dependent claim 5 requires the interactive interface to include a “data file generated from user activity” that is “configured to automatically transmit data corresponding to user selections upon initially accessing the web page.” And independent claim 21 requires the interactive interface to display “a data stream that is selected based at least in part on the information received from the user profile.” A0044.

The patent informs one of skill in the art as to the structure of an “interactive interface” for all of these functionalities. For example, the specification explains how the interactive interface is built on an “Internet interface,” which is described as the hardware that underlying the Internet.¹² A0041-A0042, 2:59-3:7 (“This transport infrastructure 10 includes, but is not limited to, a wireless or wired public or private telephone system, a local area network (LAN) or a wide area network (WAN) upon which the information users 12, 14, 16, 18 or information providers

¹² The district court properly construed “interactive interface” to be “only a part” of the “Internet interface.” A0756.

20, 22, 24, 26 are resident, the plurality of way stations in between, and all of the computing resources required to deliver the information.”). But on top of this hardware backbone, the specification describes necessary software implementation that is run on a web server that analyzes a user’s profile, create content based on that analysis, and direct delivery of that content. A0043, 6:18-38. This software is run on a web server. A0044, 7:5-10.

First, the patent teaches creating user profiles are created as shown in Figures 4A-4C. A0042, 3:50-4:26. These profiles are stored in a database. A0041, 2:38 (“FIGS. 4A-4C are database structures of user information.”); A0042, 4:11-13 (“This profile is stored in computer memory (not shown) and transferred to an information provider 20, 22, 24, 26, when a Web page is accessed.”). A data stream is created based on the user profile information. A0043, 6:25-30. The data stream has a set of “information identifiers” that work to identify the selected content. *Id.* The file structure of the information identifiers is illustrated in Figure 5B. Based on the contents of the data stream, as organized by the information identifiers, the web page is able to display the selectively tailored content, no matter what it might be. Rather than expect one particular picture or piece of text, the interactive interface expects a data stream, and then displays whatever the content might be according to the information identifiers. The patent describes this

process in detail in the preferred embodiment as being done by a “Web page manager” running on a web server:

The Web page manager matches the user's profile to the information identifier's 340A-340N. Depending upon the number of matches, the manager selects the data stream that corresponds most closely with the profile 252A. ***In this manner, the Web page manager tailors the Web page to the specific individual based on the profile.*** The Web page manager selects most appropriate data streams for the current information user 12, 14, 16, 18 depending upon the currently available data streams and the profile of the individual. Although there may be a standard Internet protocol developed which may require an information user 12, 14, 16, 18 to input their profile in a standard format such as 100 different sorting aspects, this is not required. ***The Web page manager will use those downloaded portions and will tailor the Web page accordingly.***

A0043, 6:18-38 (emphasis added); A0044, 7:5-10. This is describing the interactive interface—the creation of a selectively tailored medium by which a web site user communicates with a web site information provider. Figure 7 illustrates this. There the Web page manager is providing dynamic data based on the user profile stored in the database of three different lines of products (high end, medium, and low end). A0040, Fig. 7. And during the prosecution history, the inventor explained that the “interactive interface” is either in “computer memory or file with a plurality of fields which hold data” and corresponds to “tangible computer readable media supported by the specification.” A0810, Response to April 17, 2008, Office Action, p. 12.

Faced with this abundance of explanation, one of skill in the art would understand “interactive interface” to have a function that provides selectively tailored content from an information provider to a web site user and a structure of software that can create such selectively tailored content through analyzing user profiles against a database, matching content accordingly as a function of the user’s navigation history and personal characteristics, then providing the content through data streams to be displayed as web sites.

The crux of the court’s analysis, however, was that it could not absolutely say what “medium” is and what it is not. A0788. But in *Nautilus*, the Supreme Court explained that “absolute precision” is not required. Rather, one “must take into account the inherent limitations of language” and “[s]ome modicum of uncertainty. . . is the price of ensuring the appropriate incentives for innovation.” *Nautilus*, 134 S. Ct. at 2128–29 (internal citation and quotation omitted). Moreover, the Court declined to adopt a test that would render a claim invalid when “readers could reasonably interpret the claim’s scope differently.” *Id.*

The district court’s construction of “interactive interface” provides reasonable certainty as to the term’s meaning. A medium is a means of communicating. In terms of the ’382 patent, as explained above, the medium described as the software and hardware of communicating specifically tailored information to be displayed on a web site—tailored based on the user’s

characteristics and web site navigation data. Nor is it fatal to the patent that the specification does not call out all things that could or could not be an interactive interface. Mr. Halt filed his application in 1998. He was not required to enumerate all of the actual instances of an interactive interface that then existed or could exist throughout the term of the patent. *See Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 907–08 (Fed. Cir. 2004). What is required is that the patent makes clear what an interactive interface is and what it must do. That is made plain both by the claims and the supporting specification.

Building on its misunderstanding of “medium,” the district court went on to say it could not understand a “selectively tailored medium.” The ’382 patent is about selectively tailoring the medium—*i.e.*, the content to create a web site—to an individual user. A0032, Abstract (“An Internet interface provided by an internet web server provides web pages presents in a manner which is tailored to an individual user. The interface provides web site navigation data to the user in accordance with personal preferences provided by the user.”). The specification is replete with examples and teachings of how to do this. A0042-43, 3:50-6:38. Yet, the district court was concerned that it was “information,” “Internet interface,” “profiles,” and “data streams” that were being tailored, not the “medium” itself. A0789. Most of these are components of the interactive interface. Thus, the interface is selectively tailoring the medium in such a way that customized “data

streams” can be selected and displayed based on the user’s characteristics and website navigation data, as stored in profiles. A0042, 3:40-4:60. Again, this is taught as being done by software, for example by a web page manager, being run on a web server. A0043, 6:18-38; A0044, 7:5-10.

The district court rejected that the selectively tailored medium invoked software, such as a web page manager because it did “not know what ‘medium’ is.” A0790.¹³ Setting aside the somewhat circular nature of this reasoning, if one of skill in the art did understand medium to include “software,” as IV argues he or she would, then it would resolve district court’s purported ambiguity. The district court also found that software, “once programmed,” could not be selectively tailored. *Id.* The software package as a whole, for example the web page manager, would not change—but its output, which is the medium or message being communicated, must change and must do so based on the selectively tailoring of the content. Indeed, it is the dynamic nature of the output that not only is at the

¹³ The district court also rejected that “web page manager” could save the term from indefiniteness because it is not found within the claims itself. Mr. Halt did not intend to limit his invention to one particular embodiment and thus did not claim web page manager, but if the district court believes that construing “interactive interface” as including a web page manager would save it from indefiniteness, then it should have raised this concern during claim construction. *Athletic Alt. Inc. v. Prince Mfg., Inc.*, 73 F.3d 1573, 1581 (Fed. Cir. 1996) (choosing the narrower claim construction in order to avoid invalidating the claim on indefiniteness grounds).

heart of the invention but also provides clarity to one of skill in the art whether the web page interface is within the metes and bounds of the claims. A0042, 3:40-49 (“The system 9 of the present invention for providing an advanced, selectively tailored Internet interface is shown in FIG. 3. As shown, both the information users 12, 14, 16, 18 and the information providers 20, 22, 24, 26 are selectable and changeable entities; in contrast to the static entities that presently comprise the Internet.”). If software provides different web page content based on user characteristics and website navigation data, it is within the claimed “interactive interface.”

C. The District Court Erred in Finding That the ’587 Patent Was Not Infringed Because of an Erroneous Construction of the “Machine Readable Form”

At final issue is whether the claims of the ’587 patent require that a “hard copy form” be provided with the original images to provide instructions how to categorize the images. The claims do not. The specification teaches software embodiments where the instructions are provided through a myriad of forms, including HTML code. A0106, 5:35-40. Yet the district court construed “digitally scanning a plurality of hard copy prints that have been grouped into one or more categories, each category separated by an associated machine readable instruction form” (claim 1) and “digitally scanning a plurality of hard copy prints each having an image thereon wherein said plurality of hard copy prints have been grouped

together into one or more categories, each category being associated with an instruction form” (claim 18) as requiring a “**hard copy form** that is presented and scanned along with the hard copy images and which physically separates the categories or images, as defined by the user.” A0760.¹⁴

The court’s construction (or explanation of its claim construction) is in error because it limits the claims to one embodiment and excluded other taught embodiments. *See Adams Respiratory Therapeutics, Inc. v. Perrigo Co.*, 616 F.3d 1283, 1290 (Fed. Cir. 2010) (“A claim construction that excludes the preferred embodiment is rarely, if ever, correct and would require highly persuasive evidentiary support.”). Both claims 1 and 18 require an associated instruction form and only claim 1 requires the form to be a machine-readable form. A0113-14. The form provides instructions to the system how to categorize the images. A0106, 6:43-49; A0109, 12:14-23; A0110, 13:18-25. But nothing limits the form to a physical hard copy form. Undoubtedly that is one way the invention can function,

¹⁴ This requirement was not an explicit part of the district court’s construction. Rather, the court construed both terms as: “Converting hard copy prints into digital images [wherein said plurality of hard copy prints have been grouped together into one or more categories, each category being] associated with a machine readable instruction form scanned therewith and executed by a computer.” A0760. The court then went on to elaborate that “[i]n this regard, the Court concludes that ‘machine readable instruction form’ refers to a hard copy form that is presented and scanned along with hard copy images and which physically separates the categories of images, as defined by the user.” *Id.*

but it is not the only way. For example, the '587 patent expressly teaches that instruction forms can be provided in audio or visual format:

In the particular embodiment illustrated, the kit may include pre-printed labels, a container, envelopes, order sheets, order form and an image instruction form. ***While in the particular embodiment illustrated, the instructions would typically be provided on a hard copy document, the instructions may be provided in an audio or visual format.***

A0106, 5:61-6:4 (emphasis added). The '587 patent further teaches that forms and the instructions can be displayed on a screen that can be used for specifying customer orders and instructions. For example, the specification explains that the order form “can equally be provided on a computer screen and associated with a computer for forwarding the customer order electronically to a retailer or image service provider . . .” A0109, 12:14-23. This can be done through internet-based HTML forms, which would also be provided on a computer screen. *See, e.g.*, A0106, 5:35-40, 6:1-5, 6:39-40, 6:46-47. For claim 1, the form is “machine readable” because the category related instructions provided by the user in fields of the form can be read and acted upon by a computer. A0110, 13:18-25. This can be done through a scanned form or through software instructions. A0106, 5:35-40, 6:1-5, 6:39-40, 6:46-47; A0109, 12:14-23; A0110, 13:18-25.

Because the requirement of “hard copy forms” is not part of the district court’s construction, no change in construction is required. Rather, IV respectfully requests the Court find that the district court’s explanation of its construction, as

requiring hard copy forms, is erroneous, and vacate the judgment of non-infringement (which is predicated on the erroneous explanation).

IX. CONCLUSION

For the foregoing reasons, IV respectfully requests that the Court find (1) that the (1) '382 and (2) '137 patents claim eligible subject matter because each claims very specific applications of precisely limited claims, (3) that the term “interactive interface” as used in the '382 patent is not indefinite because, in light of the specification, one of skill in the art would have reasonable clarity as to its scope; and (4) that the '587 patent does not require “hard copy forms” to be used in scanning and categorizing digital images, because to require otherwise excludes all taught software embodiments.

Furthermore, based upon these findings, IV respectfully requests that the Court vacate the district court’s judgment with respect to the '382, '137 and '587 patents and remand for further proceedings.

Dated: July 28, 2014

Respectfully submitted,

/s/ Thomas R. Burns, Jr.

Thomas R. Burns, Jr., 70857

ADDUCI, MASTRIANI & SCHAUMBERG, L.L.P.

1133 Connecticut Ave., NW, 12th Floor

Washington, DC 20036

burns@adduci.com

Telephone: 202.467.6300

Facsimile: 202.466.2006

Elizabeth Day
Clayton Thompson
Marc Belloli
FEINBERG DAY ALBERTI &
THOMPSON, LLP
1600 El Camino Real, Suite 280
Menlo Park, CA 94025
Telephone: 650.618.4360

FEIN700114-2

ADDENDUM A

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Alexandria Division

INTELLECTUAL VENTURES I LLC,)	
<i>et al.</i> ,)	
)	
Plaintiffs,)	
v.)	Civil Action No. 1:13-cv-00740 (AJT/TRJ)
)	
CAPITAL ONE FINANCIAL)	
CORPORATION, <i>et al.</i> ,)	
)	
Defendants.)	
)	

CLAIM CONSTRUCTION ORDER

On June 19, 2013, Intellectual Ventures I, LLC and Intellectual Ventures II, LLC (collectively referred to as “IV”) brought suit against Capital One Financial Corporation and certain of its affiliated entities (collectively referred to as “Capital One”), claiming that Capital One infringed the following four patents:

- (1) U.S. Patent No. 7,664,70, entitled “Masking Private Billing Data By Assigning Other Billing Data to Use in Commerce With Businesses” (“the ’701 patent”);
- (2) U.S. Patent No. 7,603,382, entitled “Advanced Internet Interface Providing User Display Access of Customized Webpages” (“the ’382 patent”);
- (3) U.S. Patent No. 8,083,137, entitled “Administration of Financial Accounts” (“the ’137 patent”); and
- (4) U.S. Patent No. 7,260,587, entitled “Method for Organizing Digital Images” (“the ’587 patent”).¹

¹ IV is no longer seeking relief based on U.S. Patent No. 6,182,894.

The parties have raised issues concerning the construction of certain claims presented by these patents, with supporting memoranda and proposed constructions, and on November 18, 2013, the Court held a *Markman* hearing, following which the Court took these issues under advisement; and the Court, by this Order, construes those claims as set forth herein.

Relevant Law

The construction or interpretation of a claim is a question of law. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995), *aff'd* 517 U.S. 370 (1996). Generally, the words of the claim are to be given their ordinary and customary meaning, that is, the meaning they would have “to a person of ordinary skill in the art in question at the time of the invention.” *Phillips v. AHW Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005). “[I]n interpreting an asserted claim, the court should look first to the intrinsic evidence of record, i.e., the patent itself, including the claims, the specification, and, if in evidence, the prosecution history.” *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). However, the court may also consider extrinsic evidence, including, for example, treatises, dictionaries, and expert testimony. *Phillips*, 415 F.3d at 1317-18.

A claim to the means of accomplishing a task may constitute a means-plus-function claim falling within the scope of 35 U.S.C. § 112 ¶ 6. Section § 112, ¶ 6 provides that “[a]n element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.” Thus, “§ 112, ¶ 6 operates to restrict claim limitations drafted in such functional language to those structures, materials, or acts disclosed in the specification (and their equivalents) that perform the claimed function.” *Personalized Media Communications, LLC v.*

Int'l Trade Comm'n, 161 F.3d 696, 703 (Fed. Cir. 1998). “Means-plus-function claiming applies only to purely functional limitations that do not provide the structure that performs the recited function.” *Phillips*, 425 F.3d at 1311. There is a rebuttable presumption that § 112, ¶ 6 applies if the word “means” appears in the claim language. *Trimed, Inc. v. Stryker Corp.*, 514 F.3d 1256, 1259 (Fed. Cir. 2008). Where a means plus function limitation is expressed in “means plus function” language and it does not recite definite structure in support of its function, it is subject to the requirements of 35 U.S.C. § 112, ¶ 6 (1994). *B. Braun Med., Inc. v. Abbott Labs.*, 124 F.3d 1419, 1424 (Fed. Cir. 1997). In construing a means plus function term, “[t]he first step in construing such a limitation is to identify the function of the means-plus-function limitation. The next step is to identify the corresponding structure in the written description necessary to perform that function.” *Texas Digital Sys., Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1208 (Fed. Cir. 2002) (internal citations omitted). The Court must follow the claim language in defining the function. *Id.* Here, the function language is taken directly from the claim and the parties agree. As far as the structure, § 112, ¶ 6 states that a means-plus-function claim “shall be construed to cover the corresponding structure ... described in the specification.” Furthermore, “structure disclosed in the specification is ‘corresponding’ structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim.” *B. Braun Med., Inc.* at 1424. That is, the Court must determine what structures are necessary and associated or linked with the function at issue.

Title 35 U.S.C. § 112, ¶ 2 requires that every patent's specification “conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.” Thus, a claim may be invalid for indefiniteness where the claim language is so standardless that it cannot be meaningfully applied. “The primary purpose

of the definiteness requirement is to ensure that the claims are written in such a way that they give notice to the public of the extent of the legal protection afforded by the patent, so that interested members of the public, *e.g.*, competitors of the patent owner, can determine whether or not they infringe.” *All Dental Prodx, Inc. v. Advantage Dental Prods., Inc.*, 309 F.3d 774, 779 (Fed. Cir. 2002).

Indefiniteness is a question of law. *Atmel Corp. v. Information Storage Devices, Inc.*, 198 F.3d 1374, 1378 (Fed. Cir. 1999). Because there is a presumption that patents are valid, an alleged infringer asserting that a claim term is indefinite must so prove by clear and convincing evidence. *See Bancorp Servs., LLC v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1371 (Fed. Cir. 2004). “Only claims not amenable to construction or insolubly ambiguous are indefinite.” *Source Search Tech., LLC v. LendingTree, LLC*, 588 F.3d 1063, 1076 (Fed. Cir. 2009). A claim satisfies the definiteness requirement of § 112 “[i]f one skilled in the art would understand the bounds of the claim when read in light of the specification.” *Exxon Research & Eng'g Co. v. United States*, 265 F.3d 1371, 1375 (Fed. Cir. 2001). A means-plus-function claim is invalid for indefiniteness if the specification fails to disclose a structure corresponding to the function. *See Blackboard, Inc. v. Desire2Learn, Inc.*, 574 F.3d 1371, 1382 (Fed. Cir. 2009). A determination whether claims are indefinite can often be made at the claim construction phase; but a district court may determine that a claim is amenable to construction at the *Markman* hearing stage, but then later determine that the claim is nevertheless insolubly ambiguous, i.e., does not adequately delimit the bounds of the claimed invention. *See Biosig Instruments, Inc. v. Nautilus, Inc.*, 715 F.3d 891, 898-899 (Fed. Cir. 2013).

Claim Construction

Based on the above principles, and upon consideration of the patents, and their specifications, the prosecution history, where relevant, memoranda in support of the parties' positions on claims construction and the presentations and arguments of counsel at the *Markman* hearing held on November 18, 2013, it is hereby

ORDERED that the following terms of the claims of the patents at issue shall, for the purpose of this action, be construed as follows:

A. The '701 Patent

1. **"Billing service" (Claims 1, 3-8, 11, 15, 16)** shall mean "An electronic service that provides substitute billing data for particular businesses for use in commercial transactions with the businesses."
2. **"Associate[ing] a first and second billing data, that are separate and distinct, with the first and the second businesses respectively" (Claims 5, 10, 17)** shall be construed in accordance with its plain and ordinary meaning.
3. **"Subsequent purchasing transactions" (Claim 5)** shall mean, as the parties have agreed, "Purchasing transactions that occur after the billing service provides the first and second billing data for use by the user."

B. The '382 Patent

1. **"interactive interface" (Claims 1, 5-6, 16, 21)** shall mean "a selectively tailored medium by which a web site user communicates with a web site information provider." In this regard, the Court concludes that Capital One's proposed construction is overly broad, that the "interactive interface" is the medium itself, and that the word "advanced" is used to describe only the "internet interface," of which the "interactive interface" is only one part.

2. **“Dynamic web site navigation data”/ “Web site navigation data” (Claims 1, 16, 21)** shall mean, as the parties have agreed and notified the Court at the hearing on November 18, 2013, “Data representing portions of the web site visited by the user.”

3. **“Display depicting portions of the web site visited by the user as a function of the user’s personal characteristics” (Claim 1)** shall mean “A display depicting portions of the web site visited by the user preselected by a web page manager by matching personal characteristics in a user profile automatically downloaded from the interactive interface based on information identifiers for portions of the web site.” In this regard, the Court concludes that the word “display” does not refer to a physical device but rather a pictorial or graphic depiction shown to the user regarding what portion of the website that user has visited. While that pictorial or graphic image would have to be viewed on an electronic device, such as a monitor or cell phone screen, the claimed invention is not of that device itself, but rather a method for obtaining and displaying information based on a user’s profile.

4. **“Display depicting portions of the web site visited by the user as a function of the plurality of fields having data descriptive of a user” (Claim 16)** shall mean “A display depicting portions of the web site visited by the user preselected by a web page manager by matching a plurality of fields having data descriptive of a user in a user profile automatically downloaded from the interactive interface based on information identifiers for portions of the web site.”

5. **“Display depicting portions of a web site visited by the user based at least in part on the received data from the user profile” (Claim 21)** shall mean “A display depicting portions of the web site visited by the user preselected by a web page manager based at least in part on the

received data from the user profile automatically downloaded from the interactive interface based on information identifiers for portions of the web site.”

C. The ‘137 Patent

1. “Means for storing a profile keyed to a user identity and containing one or more user-selected categories to track transactions associated with said user identity, wherein individual user-selected categories include a user pre-set limit” (Claim 1).

As the parties agree, this language shall be construed as a means-plus-function term. The function is the function “For storing a profile keyed to a user identity and containing one or more user-selected categories to track transactions associated with said user identity, wherein individual user-selected categories include a user pre-set limit.” The Court also concludes that the structure consists of “Elements 15 (PROCESSOR), 16 (DATABASE), and 17 (PROFILES) of Figures 1 and 2 and equivalents thereof.” In this regard, the Court concludes that “element 320 (STORE IN DATABASE) of Figure 3A-B” that IV proposes as part of the structure is part of the function, as it is a process that pertains to the act of storage in a database within the structure and therefore is not part of a structure itself.

2. “Means for presenting transaction summary data for at least one of the one or more user-selected categories, said transaction summary data containing said at least one user-selected category’s user pre-set limit” (Claim 3).

As the parties agree, the function is the function “For presenting transaction summary data for at least one of the one or more user-selected categories, said transaction summary data containing said at least one user-selected category’s user pre-set limit.” The Court also concludes that the structure consists of “Elements 15 (PROCESSOR), 16 (DATABASE), and 17 (PROFILES) of Figures 1 and 2, a network serving as a communications link (e.g., an account

clearing network, a computer network such as the internet, or a telephone network), and a printer or auxiliary communication path, such as a cell phone, pager, or other device, and equivalents thereof.” In this regard, the Court concludes that the omitted elements of IV’s proposed structure are aspects of its function; and that the omitted elements of Capital One’s proposed construction unreasonably narrow the language of the structure.

3. “Means for assigning individual purchasable items to one or both of: a natural category or a user-specified category” (Claim 3)

As the parties agree, the function is the function “For assigning individual purchasable items to one or both of: a natural category or a user-specified category.” The Court also concludes that the structure consists of “Elements 15 (PROCESSOR), 16 (DATABASE), and 17 (PROFILES) of Figures 1 and 2 and equivalents thereof.” In this regard, the Court concludes that IV’s proposed “element 314 (ASSIGN ITEMS TO CATEGORIES (BY SUB-USER IF DESIRED)) of Figure 3A-B” as part of the structure, is part of the function and not the structure.

4. “Storing, in a database, a profile keyed to a user identify” / “Storing, in a database, a profile keyed to a user identity and containing one or more user-selected categories to track transactions associated with said user identity” (Claims 5, 12) shall be construed according to its plain and ordinary meaning.

5. “User-selected category[ies]” (Claims 1, 2, 4-6, 8, 12-13, 15, 19, 21-24) shall be construed according to its plain and ordinary meaning.


D. The ‘587 Patent

1. “Automatically organizing digital images” (Claims 1, 18), which the Court concludes is a claim limitation, shall be construed according its plain and ordinary meaning.

2. **“digitally scanning a plurality of hard copy prints [that have been grouped into one or more categories, each category separated by] an associated machine readable instruction form” (Claim 1) / “digitally scanning a plurality of hard copy prints each having an image thereon [wherein said plurality of hard copy prints have been grouped together into one or more categories, each category being] associated with an instruction form” (Claim 18)** shall both mean “Converting hard copy prints into digital images [wherein said plurality of hard copy prints have been grouped together into one or more categories, each category being] associated with a machine readable instruction form scanned therewith and executed by a computer.” In this regard, the Court concludes that the “machine readable instruction form” refers to a hard copy form that is presented and scanned along with the hard copy images and which physically separates the categories of images, as defined by the user. It is also to be distinguished from the “instructions” to the user as to how to use the system, which may exist in either audio or visual formats, in addition to hard copy format.

3. **“Obtaining hard copy prints from a plurality of different sources” (Claim 18)** shall be construed according to its plain and ordinary meaning.

The Clerk is directed to forward copies of this Order to all counsel of record.



Anthony J. Prenga
United States District Judge

Alexandria, Virginia
December 18, 2013

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF VIRGINIA
Alexandria Division

INTELLECTUAL VENTURES I LLC, *et al.*,

Plaintiffs

v.

CAPITAL ONE FINANCIAL CORP., *et al.*,

Defendants

Case No. 1:13cv740
(AJT/TCB)

ORDER

This matter is before the Court on Plaintiffs' stipulation to, and motion for entry of, judgment of non-infringement of their claims under United States Patent No. 7,260,587 ("the '587 patent") in favor of Defendants, Capital One Financial Corporation, Capital One Bank (USA) National Association, and Capital One, National Association (together, "Defendants"). Upon consideration of the motion, it is hereby

ORDERED that the motion is granted, and JUDGMENT OF NON-INFRINGEMENT of Plaintiffs' claims under the '587 patent (Doc. 1, Fifth Claim for Relief) is hereby entered in favor of Defendants; and it is further


ORDERED that the Defendants' counterclaims (Doc. 88, Counts Nine and Ten) regarding the '587 patent are hereby DISMISSED WITHOUT PREJUDICE; and its is further

ORDERED that no fees, expenses, or costs are awarded based on this order, and all such issues are reserved for later consideration at the conclusion of the case; and it is further

ORDERED that this order is not a separate judgment under Rule 54(b), and it does not affect the pendency of any other claim, counterclaim, or defense.

ENTERED this 23rd day of January 2014.

Alexandria, Virginia



Anthony J. Trenga
United States District Judge
United States District Judge

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Alexandria Division

INTELLECTUAL VENTURES I LLC,)
et al.,)
)
Plaintiffs,)
v.)
)
CAPITAL ONE FINANCIAL)
CORPORATION, *et al.*,)
)
Defendants.)
_____)

Civil Action No. 1:13-cv-00740 (AJT/TRJ)

MEMORANDUM OPINION

Before the Court is defendants' Motion for Summary Judgment [Doc. No. 239] (the "Motion"), upon which the Court held a hearing on April 2, 2014, following which the Court took the motion under advisement. Upon consideration of the Motion, the memoranda and exhibits filed in support thereof and in opposition thereto, and the arguments of counsel at the hearing held on April 2, 2014, and for the following reasons, the Motion will be GRANTED and this matter DISMISSED.

Background

On June 19, 2013, Intellectual Ventures I, LLC and Intellectual Ventures II, LLC (collectively referred to as "IV") brought suit against Capital One Financial Corporation and certain of its affiliated entities (collectively referred to as "Capital One"), claiming that Capital One infringed four of its patents, of which only two remain at issue in the present litigation: (1) U.S. Patent No. 7,603,382, entitled "Advanced Internet Interface Providing User Display Access of Customized Webpages" ("the '382 Patent"); and (2) U.S. Patent No. 8,083,137, entitled "Administration of Financial Accounts" ("the '137 Patent"). On December 18, 2013, the Court

issued its Claim Construction Order [Doc. No. 162], and on February 28, 2014, Capital One filed its Motion for Summary Judgment [Doc. No. 239] presently before the Court.

Analysis

I. Patentability Under 35 U.S.C. § 101

Capital One contends that both patents consist of unpatentable subject matter under Section 101. Accordingly, Capital One's position, which is "based on a challenge to the eligibility of the subject matter[,] must be proven by clear and convincing evidence." *CLS Bank Int'l v. Alice Corp. Pty. Ltd.*, 717 F.3d 1269, 1304-05 (Fed. Cir. 2013), *cert. granted*, 134 S. Ct. 734, 187 L. Ed. 2d 590 (U.S. 2013).

As to the '137 Patent, IV asserts Claims 5, 6, 7, 8, 9, 10, and 11 of the '137 Patent, of which Claim 5 is the independent claim upon which the remaining claims are dependent.¹ The claimed invention, in essence, utilizes user-selected pre-set limits on spending that are stored in a database that, when reached, communicates a notification to the user via a device.² Claim 5 of the '137 Patent reads:

A method for:

¹ Plaintiff conceded at the hearing held on April 2, 2014 that the subject matter patentability of all of its claims under Section 101 rises or falls based on the patentability of independent Claim 5.

² The Summary of the invention states, in part, that it is "a system and method which allows consumer users to establish self-imposed limits on the user's spending (borrowing) such that when the limit is reached the consuming user is notified. This notification can be before, during or after the point-of-sale transaction, and can be delivered, if desired, by the account clearing network and printed on the users purchase receipt. The notification message can be delivered via a phone call, email or over an Internet connection to the user. The notification can be to one or more designated third parties, such as a parent, card owner, or a debt counselor." '137 Patent at 1:65-2:8.

storing, in a database, a profile keyed to a user identity and containing one or more user-selected categories to track transactions associated with said user identity, wherein individual user-selected categories include a user pre-set limit; and causing communication, over a communication medium and to a receiving device, of transaction summary data in the database for at least one of the one or more user-selected categories, said transaction data containing said at least one user-selected category's user pre-set limit.

'137 Patent at 10:4-15.

Capital One argues that the '137 Patent covers simply the abstract idea of basic budgeting, whereby a user categorizes transactions and establishes limits on the charges he or she desires for those categories. IV argues that the '137 Patent is not simply an abstract idea, but rather "cover[s] a specific patent eligible application of database technology for electronically administering financial accounts." Mem. in Op. at 7.³ In support of this position, IV points out that, "[i]n accord with the claimed implementation, there must be a database that integrates profile data keyed to a user identi[t]y and transaction summary data that is then communicated to a device." Mem. in Op. at 8.

As to the '382 Patent, IV asserts Claims 1-5, 16, 17, 19, and 20-22 of the '382 Patent, with the independent claims being 1, 16 and 21. The invention is summarized in the Patent as "a system for delivering information from an information provider to an information user that is selectively tailored toward the capabilities of the information provider and the needs of the information user." '382 Patent at 2:1-6.⁴

³ In its Background section, the '137 Patent describes the problem to be solved as, essentially, the inability of people to keep track of their spending on a real-time basis, especially those who, because of their spending habits, are suffering from personal financial difficulties and distress, and thus should be on strict budgets. See '137 Patent at 1:18-47.

⁴ The Summary continues:

Claim 1 is the independent system claim of the '382 Patent and reads:

A system for providing Web pages accessed from a Web site in a manner which presents the Web pages tailored to an individual user, comprising:
an interactive interface configured to provide dynamic Web site navigation data to the user, the interactive interface comprising:
a display depicting portions of the Web site visited by the user as a function of the Web site navigation data; and
a display depicting portions of the Web site visited by the user as a function of the user's personal characteristics. '382 Patent at 7: 13-21.⁵

Claim 21 is representative of the two independent method claims asserted and reads:

A method comprising:
receiving data from a user profile associated with a user;
in response to a request associated with the user, sending a data stream that is selected based at least in part on the received data from the user profile;
and
displaying the data stream via an interactive interface, the interactive interface comprising:
a display depicting portions of a web site visited by the user as a function of web site navigation data; and
a display depicting portions of the web site visited by the user based at least in part on the received data from the user profile.

The system includes an interactive interface which provides a medium for information users to communicate with information providers. More specifically, the system includes means for the information user to tailor the profile of the information user depending upon the needs or desires of the information user. Separate means permit the information provider to view this information user profile and to structure the information seen by the information user in a format that is most suitable to that information user.

The system also enables the information user to operatively tailor their profile on a real time basis. Thus, the information provider may tailor the information provided to the Internet using community depending upon the time of day, business conditions or other factors.

Accordingly, it is an object of the present invention to provide an advanced Internet interface between Internet information users and Internet information providers.

Id. at 2:6-23.

⁵ Dependent Claims 2-5 add detail and additional functions to the system in Claim 1. *Id.* at 7:22-47.

Id. at 8:43-54.

Claim 16, the other independent method claim, adds a “storing” step to Claim 21. *Id.* at 8:17-32.⁶

As with the ‘137 Patent above, Capital One argues that the ‘382 Patent claims an unpatentable abstract idea. In particular, Capital One claims that the asserted claims cover the abstract idea of “personalizing a website display to reflect a user’s characteristics and navigation history.” Mem. in Sup. at 13. It also contends that the claims do not sufficiently apply this idea through any specific machine, but rather simply incorporate generic components that store, transmit, or display various types of information. According to Capital One, IV identifies many different structures that *could* form the interactive interface, but all of which are generic computer components and none of which IV could say for certain makes up the interactive interface or is required.

IV argues in response that this Court’s construction of “interactive interface” confirms that the ‘382 Patent’s limitations are concrete. IV also argues that the process by which the information is stored, transmitted and displayed transforms the information and also that the claimed components are a particular machine, such that the ‘382 Patent survives the machine-or-transformation test. In terms of “concrete limitations,” IV points in particular to its Claims 1, 16 and 21, which include (1) an “interactive interface;” (2) “dynamic web site navigation data” that is provided “to the user;” (3) “a display that depicts portions of the web site visited by the user as a function” either of “the website navigation data” or “the user’s personal characteristics;” (4) “user profile attributes;” and (5) “data stream[s].” Mem. in Op. at 10. IV argues further that

⁶ The asserted dependent method claims add focus and detail to some aspects of the basic idea. See, e.g., Claims 17, 19, 20 (adding different types of profiles) and Claim 22 (adding personalization of a coupon). *Id.* at 8:33-35, 8:38-40, 8:41-42, and 8:55-59.

these limitations sufficiently limit the claims to specific applications of web page technology and, even more narrowly, to specific applications of customized web page technology.

Applying the holdings and reasoning of *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 182 L. Ed. 2d 321 (2012), *Parker v. Flook*, 437 U.S. 584, 98 S. Ct. 2522, 57 L. Ed. 2d 451 (1978), *Bilski v. Kappos*, 130 S. Ct. 3218, 177 L. Ed. 2d 792 (2010) and *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366 (Fed. Cir. 2011), the Court concludes as a matter of law, based on a clear and convincing evidence, that neither the ‘137 nor the ‘382 patent contains patentable subject matter under Section 101. Neither satisfies either prong of the “machine-or-transformation” test nor otherwise contains a “patentable process,” as that term is defined in § 100(b) or as established by the “guideposts” provided by Supreme Court precedents. *See Bilsky*, 130 S. Ct. at 3231 (“The Court, therefore, need not define further what constitutes a patentable ‘process,’ beyond pointing to the definition of that term provided in § 100(b) and looking to the guideposts in *Benson*, *Flook*, and *Diehr*.”). Nothing in the Court’s Claim Construction establishes patentability since, however the claim terms may be construed, each patent consists of nothing more than the entry of data into a computer database, the breakdown and organization of that entered data according to some criteria, disclosed in the ‘137 patent, but not in the ‘382 patent, and the transmission of information derived from that entered data to a computer user, all through the use of conventional computer components, such as a database and processors, operating in a conventional manner.⁷ There is no inventive technology or other inventive concept that authorizes the protections of a patent, such as an improvement in

⁷ Even were software patentable, there is no attempt in either patent to patent specific software that implements the described functions. In fact, the “web-site manager” of the ‘137 Patent, which IV has described as “software,” is not part of the claimed invention, as stated in the specific claims.

the workings of the computer or the transmissibility of data or some other transformation of data into something qualitatively beyond the informational content of the data entered, even though the data might be organized and manipulated to disclose useful correlations. Rather, these patents are “drawn to a mental process – i.e., an abstract idea,” *Cybersource*, 654 F.3d at 1374, and the patents simply do not “add enough” by way of the disclosed applications of these abstract ideas, *see Mayo*, 132 S. Ct. at 1297 (“To put the matter more precisely, *do the patent claims add enough* to their statements of the correlations to allow the processes they describe to qualify as patent-eligible processes....”) (emphasis added).

There also is nothing in the “postsolution activity” that reflects the patentability of any specific applications of these abstract ideas. *See id.* at 1301. At most, the patents describe a more efficient system or method for performing tasks than could be done without a computer, i.e., monitoring expenditures according to preset limits (the ‘137 Patent), or determining what would appeal to a particular user from a particular website (the ‘382 Patent). In short, this is nothing more than “the mere manipulation or reorganization of data.” *See CyberSource* at 1375 (“The mere manipulation or reorganization of data, however, does not satisfy the transformation prong.”); *see also Flook*, 437 U.S. at 591, (“The process itself, not merely the mathematical algorithm, *must be new and useful.*”) (emphasis added).

II. Indefiniteness under § 112(b) as to the ‘382 Patent.

Capital One also argues that Claim 5, and its dependent claims, fail to satisfy the requirements of Title 35 U.S.C. § 112(b). That statute requires that every patent's specification “conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.” Thus, a claim may be invalid for indefiniteness where the claim language is so standardless that it cannot be meaningfully applied.

“The primary purpose of the definiteness requirement is to ensure that the claims are written in such a way that they give notice to the public of the extent of the legal protection afforded by the patent, so that interested members of the public, *e.g.*, competitors of the patent owner, can determine whether or not they infringe.” *All Dental Prodx, Inc. v. Advantage Dental Prods., Inc.*, 309 F.3d 774, 779 (Fed. Cir. 2002). Indefiniteness is a question of law. *Atmel Corp. v. Information Storage Devices, Inc.*, 198 F.3d 1374, 1378 (Fed. Cir. 1999). Because there is a presumption that patents are valid, an alleged infringer asserting that a claim term is indefinite must so prove by clear and convincing evidence. *See Bancorp Servs., LLC v. Hartford Life Ins. Co.*, 359 F.3d 1367, 1371 (Fed. Cir. 2004). “Only claims not amenable to construction or insolubly ambiguous are indefinite.” *Source Search Tech., LLC v. LendingTree, LLC*, 588 F.3d 1063, 1076 (Fed. Cir. 2009). A claim satisfies the definiteness requirement of § 112 “[i]f one skilled in the art would understand the bounds of the claim when read in light of the specification.” *Exxon Research & Eng'g Co. v. United States*, 265 F.3d 1371, 1375 (Fed. Cir. 2001).

At issue is whether the term “interactive interface,” as construed by the Court, and the dependent “Display Terms” terms (which all incorporate the “interactive interface” term), fail to meet the definiteness requirement of § 112(b) because the term “interactive interface” in Claim 1 is insolubly ambiguous. The Court has construed “interactive interface” as “a *selectively tailored medium* by which a web site user communicates with a web site information provider.” Doc. No. 162 at 5 (emphasis added).⁸

⁸ IV proposed that “interactive interface” be construed as an “*advanced* selectively tailored medium by which a web site user communicates with a web site information provider.” In essence, the Court adopted IV’s proposed construction of “interactive interface,” with the exception of the word “advanced.”

Having reviewed the record, including the declarations and testimony of both IV's and Capital One's experts, the Court finds and concludes as a matter of law, based on clear and convincing evidence, that the '382 Patent fails for indefiniteness and is therefore unenforceable. More specifically, the '382 Patent does not disclose to someone of ordinary skill in the art enough information to understand what an "interactive interface" is in fact. IV's experts have said variously what a "selectively tailored medium" could be, but cannot say definitively what it is or is not. Similarly, nothing in the Court's construction of "interactive interface," the '382 patent's claim language, or the '382 Patent's specification more generally provides any guidance on what the "medium" is, how it is or even could be "selectively tailored," or how (if at all) the selective tailoring relates to communication between web site users and web site information providers as the patent requires. Thus, it is difficult to know whether a "selectively tailored medium" has any specific structure or scope and neither the public nor a person of ordinary skill in the art could reasonably determine the precise metes and bounds of the claimed invention.⁹

⁹ IV argues that, since the Court was able to construe "interactive interface," this should "foreclose the issue." Mem. in Op. at 24. "Claims are considered indefinite when they [1] are not amenable to construction or [2] are insolubly ambiguous." *Young v. Lumenis, Inc.*, 492 F.3d 1336, 1346 (Fed. Cir. 2007). In this regard, courts recognize that while it will often make sense to decide whether claims are indefinite at the claim construction phase, it is possible for the district court to determine that a claim is amenable to construction at the *Markman* hearing, but then later determine that the claim is nevertheless insolubly ambiguous, i.e., does not adequately delimit the bounds of the claimed invention. See *Biosig Instruments, Inc. v. Nautilus, Inc.*, 715 F.3d 891, 898-899 (Fed. Cir. 2013), *cert. granted*, 134 S. Ct. 896, 187 L. Ed. 2d 702 (U.S. 2014) ("In and of itself, a reduction of the meaning of a claim term into words is not dispositive of whether the term is definite.... And if reasonable efforts at claim construction result in a definition that does not provide sufficient particularity and clarity to inform skilled artisans of the bounds of the claim, the claim is insolubly ambiguous and invalid for indefiniteness." (quoting *Star Scientific, Inc. v. R.J. Reynolds Tobacco Co.*, 537 F.3d 1357, 1371 (Fed. Cir. 2008))). Here, the Court essentially adopted IV's construction of "interactive interface" in its Claim Construction Order [Doc. No. 162] and now proceeds to consider the second prong of the

IV argues that the '382 Patent contains sufficient "definiteness" based on a number of contentions, including (1) that the structure associated with the "Internet interface" applies to the "interactive interface," which the Court found was part of the "Internet interface;" (2) that there are "database structures...that are used to selectively tailor content provided by a web site information provider...[;]" (3) that structure is inherent in the word medium itself; and (4) that the "medium" actually refers to software. Doc. No. 226 at 14-15.¹⁰ None of these contentions provides sufficient definition to what the "medium" is.¹¹ The Court therefore finds that the term "medium" is insolubly ambiguous.

indefiniteness analysis. For these reasons, the Court rejects IV's position that the Court's claims construction forecloses a challenge for indefiniteness.

¹⁰ At the summary judgment hearing, IV conceded that there is no hardware limitation that specifies a particular kind of computer or a particular kind of web server, but rather argued that the "selectively tailored medium" is provided by the software that provides the selectively tailored content and that the web page manager is an example of the special software that provides the tailoring.

¹¹ For example, even if the "Internet interface" had a sufficiently identified structure, simply saying that the "interactive interface" is part of the Internet interface says nothing about what the interactive interface is, and in fact makes both the interactive interface and the Internet interface ambiguous, as the Internet interface would contain an insolubly ambiguous component. Similarly, while database structures are a necessary component of the invention, have "structure," and are "*associated with* the 'selectively tailored medium,'" as IV contends, there is no indication that the "database structures" are part of the interactive interface itself or a necessary part of it. Doc. No. 226 at 15. In fact, they are simply associated structures that are necessary for the theoretical functioning of the invention because databases would be necessary to store the profiles for future use in "selectively tailoring" the displayed content in the "interactive interface;" they do not appear to perform any aspect of the selective tailoring function as IV appears to argue. Likewise, even if the Court were to accept that "structure" is inherent in a "medium," the '382 Patent provides no description whatsoever of what that structural element might actually be in this context. The only description of any structural elements relates to the "interface" description in the prior art. *See* '382 Patent at 2:54-3:3. How this prior art relates to the "interactive interface" is wholly unclear, and no limits on such structures are presented as to the "interactive interface" in the '382 Patent's claims. Finally, based on the claims and the specifications, the Court rejects any contention that the web page

Likewise problematic is that the specification fails to disclose any “tailoring” of any medium or how any such tailoring is at all “selective.” The phrase “selectively tailored” appears in the ‘382 Patent as a term descriptive not of “medium, but of “information,” “Internet interface,” “profiles,” and “data streams.” See ‘382 Patent at 1:17-19 (“the invention pertains to a system for *selectively tailoring* information delivered to an Internet user depending upon the particular needs of the user”); *id.* at 2:1-6 (“[t]he present invention is a system for delivering information from an information provider to an information user that is *selectively tailored* toward the capabilities of the information provider and the needs of the information user”); *id.* at 3:40-42 (“[t]he system 9 of the present invention for providing an advanced, *selectively tailored* Internet interface is shown in FIG. 3”);¹² *id.* at 4:15-18 (“[i]n accordance with the teachings of the present invention, the profiles 252A-252N are *selectively tailored* to the needs of the information user 12, 14, 16, 18 at a particular time”); *id.* at 5:55-56 (“...this data stream 323A may be *selectively tailored* in a different manner as will be described in detail hereinafter.”) (emphasis added in all). Nothing in the specification explains how any “medium” is somehow “selectively tailored.” IV argues that “a person of ordinary skill in the art would understand that the Web page manager is an example of computer software in ‘a selectively tailored medium’ that tailors Web pages to a specific individual based on his or her user profile.” IV’s Opposition to Capital One’s Motion for Judgment on the Pleadings [Doc. No. 226] at 16. Unexplained, however, is what the medium is, and since we do not know what the “medium” is, it impossible

manager is part of the “interactive interface.” No software or any particular hardware is mentioned anywhere in the specification.

¹² “The system in 9” refers to the system in FIG. 3 that provides for the transmission of data from the information users and information providers to the “information transport structure.” See ‘382 Patent, FIG. 3.

to know definitively what is being “selectively tailored” or what a “selectively tailored medium” might entail. Ostensibly in support of this position, IV explains that this “selectively tailoring” is accomplished via “special software that makes the medium selectively tailored.” But again unexplained is what the medium is, how the medium itself is selectively tailored, or how any associated software, which is programmed by design at the outset to select or tailor data or information, is and continues to be, once programmed, “selectively tailored” during the described process. In other words, it would appear that, even though the software may tailor the information presented, the software itself is not “selectively tailored” based on user profiles or navigation data. Furthermore, the web page manager is not mentioned within any of the claims of the ‘382 Patent. For these reasons, the Court rejects IV’s contention that a person of ordinary skill in the art would understand that the “web page manager” is an example of “a selectively tailored medium,” or is any part thereof.

As for the Display Terms, the Court has found that “the word ‘display’ does not refer to a physical device but rather a pictorial or graphic depiction shown to the user regarding what portion of the website that user has visited,” and that, as to independent Claims 1, 16 and 21, the displays are created, in part, based on information “automatically downloaded *from the interactive interface.*” Doc. No. 162 at 6-7 (emphasis added). For the above reasons, the Court must also conclude as a matter of law that the Display Terms, as construed, are also insolubly ambiguous.

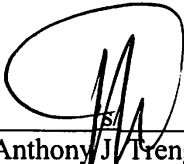
For the above reasons, the Court finds and concludes that the '382 Patent is insolubly ambiguous in violation of § 112(b), and that summary judgment in favor of Capital One is appropriate on this basis.¹³

Conclusion

For the above reasons, the Court finds and concludes that there are no genuine issues of material fact as to the application of § 101 to the '137 and '382 Patents and of § 112(b) to the '382 Patent, that defendants have shown by clear and convincing evidence that the '137 Patent and the '382 Patent are invalid on the grounds that each claims unpatentable subject matter under § 101, and that, as to the '382 Patent, certain claim terms, as discussed above, are indefinite and insolubly ambiguous, rendering the '382 Patent unenforceable under § 112(b). Capital One is therefore entitled to judgment as a matter of law. Capital One's Motion for Summary Judgment [Doc. No. 239] will therefore be GRANTED and this action DISMISSED.

An appropriate Order will issue.

The Clerk is directed to forward copies of this Memorandum Opinion to all counsel of record.



Anthony J. Trenga
United States District Judge

Alexandria, Virginia
April 16, 2014

¹³ Given the Court's conclusions with respect to patentability and indefiniteness, there is no need for the Court to rule further on the remaining grounds asserted in defendants' Motion for Summary Judgment.

Case 1:13-cv-00740-AJT-TCB Document 372 Filed 04/16/14 Page 1 of 1 PageID# 8584

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Alexandria Division

INTELLECTUAL VENTURES I LLC,)
et al.,)

Plaintiffs,)
v.)

CAPITAL ONE FINANCIAL)
CORPORATION, *et al.*,)

Defendants.)
_____)

Civil Action No. 1:13-cv-00740 (AJT/TRJ)

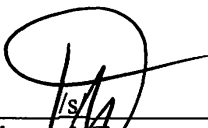
ORDER

This matter is before the Court on defendants' Motion for Summary Judgment [Doc. No. 239] ("the Motion"). Upon consideration of the Motion, the memoranda and exhibits submitted in support thereof and in opposition thereto, the arguments of counsel at the hearing held on April 2, 2014, and for the reasons stated in the Court's Memorandum Opinion [Doc. No. 371] dated April 16, 2014, it is hereby,

ORDERED that defendants' Motion for Summary Judgment [Doc. No. 239] be, and the same hereby is, GRANTED; and it is further

ORDERED that judgment be, and hereby is, entered in favor of defendants and this matter is DISMISSED with prejudice.

The Clerk is directed to enter judgment in accordance with Fed. R. Civ. P. 58 and forward a copy of this Order to all counsel of record.



Anthony J. Trenga
United States District Judge

Alexandria, Virginia
April 16, 2014

Case 1:13-cv-00740-AJT-TCB Document 376 Filed 04/22/14 Page 1 of 1 PageID# 8980

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA**

Alexandria Division

Intellectual Ventures I LLC, et al)	
)	
Plaintiff,)	
)	
v.)	Civil Action No. 1:13-cv-00740
)	
)	
Capital One Financial Corporation, et al)	
)	
Defendant.)	

JUDGMENT

Pursuant to the order of this Court entered on April 16, 2014 and in accordance with Federal Rules of Civil Procedure 58, JUDGMENT is hereby entered in favor of the defendants, Capital One Financial Corporation, Capital One Bank (USA), National Association, and Capital One Bank (USA), N.A. and against Plaintiffs, Intellectual I LLC and Intellectual Ventures II LLC.

FERNANDO GALINDO, CLERK OF COURT

By: _____/s/
Judith Lanham
Deputy Clerk

Dated: 04/22/2014
Alexandria, Virginia

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing **CORRECTED BRIEF OF PLAINTIFFS-APPELLANTS INTELLECTUAL VENTURES I LLC AND INTELLECTUAL VENTURES II LLC** was served to the parties, in the manner indicated below, this 1st day of August 2014:

**COUNSEL FOR APPELLEES CAPITAL ONE FINANCIAL CORPORATION;
CAPITAL ONE BANK (USA), NATIONAL ASSOCIATION;
& CAPITAL ONE, NATIONAL ASSOCIATION**

Matthew J. Moore
Abbott B. Lipsky, Jr.
Marguerite M. Sullivan
Gabriel K. Bell
Jeffrey G. Homrig
LATHAM & WATKINS LLC
555 Eleventh Street NW, Suite 1000
Washington, DC 20004

☒ **CM/ECF DELIVERY**

☐ **VIA FIRST CLASS MAIL**

Jeffrey G. Homrig
LATHAM & WATKINS LLC
140 Scott Drive
Menlo Park, CA 94025

☒ **CM/ECF DELIVERY**

☐ **VIA FIRST CLASS MAIL**

Dabney J. Carr IV
Robert A. Angle
TROUTMAN SANDERS LLP
1001 Haxall Point
Richmond, VA 23219

☒ **CM/ECF DELIVERY**

☐ **VIA FIRST CLASS MAIL**

/s/ Thomas R. Burns, Jr.

ADDUCI, MASTRIANI & SCHAUMBERG, L.L.P.

CERTIFICATE OF COMPLIANCE

The undersigned, counsel for Intellectual Ventures I LLC and Intellectual Ventures II LLC, hereby certifies that, in compliance with Fed. R. App. P. 32(a)(7)(B)-(C), the attached **BRIEF OF PLAINTIFFS-APPELLANTS INTELLECTUAL VENTURES I LLC and INTELLECTUAL VENTURES II LLC** is proportionally spaced, has a typeface of 14 point Times New Roman, was prepared using Microsoft Word, and contains 11,993 words.

Dated: July 28, 2014

/s/ Thomas R. Burns, Jr.

Thomas R. Burns, Jr.